JPRS 81058

15 June 1982

China Report

AGRICULTURE

No. 210

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NATIONAL

I. GENERAL INFORMATION

CHEMICAL FERTILIZERS HELP PREVENT, CONTROL WHEAT FUNGUS

Beijing RENMIN RIBAO in Chinese 30 Jan 82 p 2

[Article by Liu Qingcheng [0491 1987 1004], Xu Yulan [6079 3768 5695] of the Soil Fertility Institute, Chinese Academy of Sciences: "Why Some Chemical Fertilizers Can Prevent and Control Rhizoctonia of Wheat"]

[Text] Rhizoctonia of wheat is a type of disease of the roots of wheat infected by fungus. Because the roots of wheat are damaged, the upper part of the wheat plant cannot receive a sufficient supply of moisture and nutrients. This causes the thousand grain weight of wheat to drop and sterile white spikes emerge. Generally, the yield drops by 20 to 30 percent and the yield of seriously affected plants drops by 60 to 70 percent, with some perhaps even producing no yield. This type of disease has been discovered in all major wheat producing nations in the world. It has occurred in 17 provinces and cities in our nation, most seriously in Shandong and the Hexi Corridor in Gansu. The pathogen in the remnants of diseased plants is spread by the soil and, up to now, appropriate ways of prevention and control have not been found.

Starting from the 1950's, foreign nations have started from the viewpoint of nutritional science and have compared the effects of ammoniacal nitrogen and nitric nitrogen upon rhizoctonia of wheat. In the 1970's, China's agricultural science workers also observed that certain chemical fertilizers have the effect of preventing and controlling rhizoctonia of wheat. A lot of work has been done. We began with different varieties of chemical fertilizers and studied the function of different varieties of chemical fertilizers in preventing the disease. We discovered that the effectiveness of nitrogen and phosphorous fertilizers with the same amount of effective nutrients was very different in preventing the disease. In pot cultivation experiments, the effectiveness of ammonium sulfate and urea was compared. Ammonium sulfate applications could lower the index of the wheat disease by 25 to 30 percent. When comparing calcium superphosphate and calcium-magnesium-phosphorus fertilizers, calcium superphosphate can reduce the index of the disease by 15 to 20 percent. Large field experiments also showed the same results. When the amounts of phosphorus and nitrogen in the soil were the same, ammonium sulfate treatment was visibly better than urea treatment. According to our experiments, ammonium chloride, potassium chloride, potassium sulfate, ammonia water and potassium nitrate were all effective in preventing and controlling wheat rhizoctonia to different degrees.

Chemical fertilizers are not insecticides. Why do they have a preventive and controlling effect upon root disease of the crop? This is because when chemical fertilizers enter the soil, the affect certain properties (such as the degree of acidity and alkalinity, the concentration of ions) of the soil (especially the soil surrounding the roots). The microorganisms living in the soil and the soil environment are united. Changes in the nature of the soil will necessarily affect the microorganisms either favorably or unfavorably. Wheat rizoctonia is a fungus that is relatively tolerant to alkalinity, but not tolerant to acidity. In an acidic environment, its growth is suppressed. When physiological acidic chemical fertilizers in the soil are absorbed by the root system of the crop, an acidic protective layer is formed around the root system, and this produces the preventive effect. Although calcium superphosphate does not possess physiological acidity, it does contain some residual acid which belongs to chemically acidic fertilizers. It can reduce the pathogenicity of the pathogenic microorganisms. The function of ammonia water in preventing the disease is mainly due to the ammonia fume which is bactericidal. According to our experimental observation, ammonia water diluted eight times still has a very strong bactericidal effect upon rhizoctonia bacteria. The mechanism of disease prevention of some other chemical fertilizers still requires further study.

9296
CSO: 4007/252

READYING OF WATER PROJECTS FOR NEW YEAR IN FARMING REPORTED

Beijing RENMIN RIBAO in Chinese 18 Mar 82 p 2

[Article: "Solid Job Done Nationally in Winter Farmland Water Conservancy Construction. Change of Production Conditions To Win a Bumper Harvest in Agriculture This Year"]

[Text] During winter construction of farmland water conservancy, rural villages everywhere adapted general methods to local situations to construct a number of small and fully equipped projects able to provide benefits this year to improve conditions for agricultural production, creating favorable conditions to win a bumper harvest in agriculture this year. According to incomplete statistics from water conservancy units, nationally water conservancy projects of various kinds have been built at more than 300,000 sites, and both quality of construction and actual benefits have been improved over previous years.

In the wake of further implementation and perfection of agricultural production responsibility systems everywhere, enthusiasm of the peasant masses for improvements in production conditions and development of agricultural production is higher. They have urgently demanded construction of farmland water conservancy to increase ability to withstand disasters and to assure consistently high yields in agriculture. In some places practicing "double contraction" to households, commune members got together of their own free will to pool funds for water conservancy. The experience of many places last winter in the construction of water conservancy has demonstrated that all that is needed is serious attention on the part of leaders, adroit guidance according to circumstances, rational planning, policies that are right on the mark, adaptation of general methods to local situations, and striving for genuine benefits, and no matter the form of production responsibility system practiced in agricultural production, farmland water conservancy construction can be done and it can be done more solidly. Last winter Shandong Province newly increased or improved an irrigation area more than double that of 1980, and benefits from investment in water conservancy also increased. By persevering in all around planning, construction in installments, and adaptation to agricultural production responsibility systems, Jiangsu Province established various forms of farmland water conservancy construction responsibility systems, and satisfactorily handled the relationship between "centralized management" and "contracting," thereby arousing the enthusiasm of the masses. Work efficiency was high, quality of work good, and the pace rapid on water conservancy projects built during the winter, and 7.49 million trees were also planted in combination with the water conservancy construction for the greening of an area of 54,000 mu.

In the course of last winter's water conservancy construction, all jurisdictions showed substantial concern for proceeding from actual local circumstances in an adaptation of general methods to local situations. In view of the small amount of rainfall during 1981 and the continuation of the drought, the provinces of Shanxi, Hebei, Shandong, and Henan not only intensified management of existing project construction for active development of winter irrigation, but also focused on the need to combat drought to rebuild or build new wells, ditches, and pumping stations, and such small scale projects from which benefits can be derived during the current year, and to provide more water conservancy facilities for the spring fight against drought to protect the wheat and do spring sowing. The provinces of Sichuan and Shaanxi, which last year were severly stricken with flood and waterlogging disasters, placed the emphasis of winter construction on the rebuilding of projects destroyed by water. Last winter a workforce of 1.02 million went to work in Sichuan Province to rebuild water damaged projects at more than 10,000 places. Hanzhong Prefecture in Shaanxi Province has started work at 6,800 sites on the rebuilding of projects destroyed by water. Irrigation water is flowing already in 14 of the prefecture's 18 irrigation areas larger than 10,000 mu. As a result of various work problems during the past 2 years in Woyang County, Anhui Province, a certain amount of damage was done to projects over a wide area. During last year's winter repairs, they concentrated forces on the renovation of former water conservancy projects, practicing "one withdrawal and four returns," meaning the withdrawal from much land formerly taken, and the return to ditches, furrows for irrigation, roads, and forests. Now the former ditch, furrow, and road network has been substantially restored to provide a good foundation for combating drought and preventing waterlogging this year. In addition throughout the province each person wss aroused to plant 20 trees.

Since the beginning of the lunar new year, all jurisdictions have taken advantage of the favorable opportunity before the very busy period of spring farming to organize forces to continue construction and to wind up work on various projects. They have striven to start managing and derive benefits from every location as work is completed on it, so that the role of projects can be brought into play for this year's production.

9432
CSO: 4007/336

BRIEFS

TREE PLANTING ACHIEVEMENTS--Beijing, 16 May (XINHUA)--China achieved gratifying results in the first year of its nationwide voluntary tree planting campaign. According to data supplied by the Ministry of Forestry, some 1,100 million trees were planted last spring to meet people's tree-planting quotas. In addition, some 35 million mu of land was afforested, 3,000 million trees planted around houses and along roads, rivers and lakes and 2.8 million mu of saplings grown. A leading comrade of the ministry told XINHUA that, while the achievement is significant, there are still some problems needing to be resolved. Among them are an inadequate supply of saplings and lack of attention to trees after planting. [OW250301 Beijing XINHUA Domestic Service in Chinese 0704 GMT 16 May 82]

CSO: 4007/422

HE KANG ON BUILDING FARM RESEARCH PROJECTS

OW191141 Beijing XINHUA Domestic Service in Chinese 1512 GMT 17 May 82

[Text] Wuhan, 17 May (XINHUA)--He Kang, vice minister of agriculture, animal husbandry and fishery, at the inauguration ceremony for an agricultural testing center of the Hubei Provincial Academy of Agricultural Sciences today, said: Our country will complete the building of a number of key agricultural scientific research projects this year. This will greatly improve the conditions for agricultural scientific research in our country.

He Kang continued: The agricultural testing center of the Hubei Provincial Academy of Agricultural Sciences is the first of a number of key agricultural scientific research projects that are being built. Still to be completed are a paddy rice research institute of the Guangdong Provincial Academy of Agricultural Sciences, a laboratory of the Soil and Fertilizer Research Institute of the Chinese Academy of Agricultural Sciences, a central laboratory of the Sichuan Provincial Academy of Agricultural Sciences, a Loess Plateau Soil Testing Center of the Shaanxi Provincial Academy of Agricultural Sciences, a central laboratory of the Xinjiang Uygur Autonomous Regional Academy of Agricultural Sciences, the Agrobiological Genetic Physiology Research Institute of the Jiangsu Provincial Academy of Agricultural Sciences and the Soybean Research Institute of the Jilin Provincial Academy of Agricultural Sciences. Six of the nine key agricultural scientific research projects will engage in scientific research, with the stress on serving agricultural production, while the other three will serve agricultural production, with the stress on scientific research. These projects have been or are being built with investments from the state and from localities in order to improve material and technical conditions for agricultural scientific research and to meet the requirements of agricultural modernization in our country.

After their completion, these key agricultural scientific research projects will do work for the modernization of agricultural scientific research in our country. On the basis of further summing up experience in building agricultural scientific research projects, the Ministry of Agriculture, Animal Husbandry and Fishery will make concerted efforts together with various local governments to improve scientific research conditions and technical equipment of our country's agricultural scientific research units by stages and in groups so that they will measure up to advanced world levels.

CSO: 4007/422

BEIJING

FARM MACHINERY ENTERPRISES INCREASE EFFORTS TO MEET MARKET DEMANDS

Beijing BEIJING RIBAO in Chinese 14 Feb 82 p 1

[Article by Shi Yuandan [0670 0337 2481]: "The Enterprises of the City's Farm Machinery System Adapt to the New Situation in the Farm Villages--They Exert Efforts to Increase Products that Meet Market Demands and Small Farm Machinery"]

[Text] The enterprises subordinate to the city's Farm Machinery Bureau have conscientiously implemented the policy of readjustment, adapting to the new situation in the farm villages after implementation of the production responsibility system. They have exerted efforts to increase the production of products that meet market demands and small farm machinery and tools that are urgently needed in the farm villages. This has created a new situation in production. In January, the total production value of enterprises under the direct jurisdiction of the bureau increased 20.7 percent over the same period a year ago.

During the second half of last year, the enterprises subordinate to the Farm Machinery Bureau underwent reorganization and readjustment. To open up sales for their products, each unit improved quality on the one hand and developed sales and services on the other. At the beginning of last year, the Hand Tractor Plant only had an order for three units. This year, because the quality was improved and because the plant's representatives went deeply into the communes and brigades to offer services, the plant won the trust of the users and, at the beginning of this year, the orders jumped to more than 2,000 units. In January they organized forces to increase production and greatly hastened the progress of assembly. To deliver the products to the users in time, they organized manpower during the spring holidays to help the railroad department load and transport the units. By the first day of the Chinese New Year, 200 units had already been shipped.

Some enterprises of the farm machinery units also exerted efforts to produce more small farm machinery and accessories which were deficient in the market while they completed state plans. The City Power Machinery Plant manufactured metallic chicken coops for commune members engaged in chicken and egg production. The coops were welcomed by commune members.

9296
CSO: 4007/252

BRIEFS

SEED STANDARDIZATION COMMITTEE--Beijing, 26 May (XINHUA)--The National Technical Committee for seed standardization was set up here today. The committee will put forward proposals concerning principles, policies, technical measures and state criteria for quality control and subjects for study. Seed standardization involves the purity and germination rates of seeds as well as seed production and testing techniques. It also involves the packaging, storage and transportation of seeds. The committee was formed by people from scientific research institutes, seed farms, seed examination and management departments and colleges and seed users. [Text] [Beijing XINHUA in English 1249 GMT 26 May 82 OW]

CSO: 4020/137

PROVINCIAL TIDELAND RECLAMATION 1981 GAINS NOTED

Fuzhou FUJIAN RIBAO in Chinese 6 Feb 82 p 1

[Article by Zhao Erkang [6392 1422 1660]: "Tideland Reclamation Area in Province Tops 1 Million Mu"]

[Text] Last year our province's reclamation of tideland in coastal areas achieved new successes, the provincial plan to enclose 60,000 mu of land and reclaim and cultivate 10,000 mu of land has now been fulfilled or is about to be fulfilled, and at this point the area of tideland reclaimed by the province has topped 1 million mu.

Last year our country's coastal tideland reclamation work focused on projects to round off the enclosure of tideland and make use of the land for reclamation and cultivation. Its characteristics were: (1) there were many enclosure projects, in all eight; (2) the enclosures were comparatively smooth, all being successful the first time, and after the enclosures the sea walls were stable; (3) the longstanding, big, and difficult reclamation projects like the Ningde Two City and Xiapu Three Red were successfully enclosed; and (4) the rate of reclamation and cultivation was fairly fast and the economic results were great. The policy of relaxation has aroused the enthusiasm of the collective and the individual in many localities, and over 96,000 mu of tideland has been reclaimed and cultivated; according to the principle of farming on land suitable for farming, fishing in areas suitable for fishing, and extracting salt on land suitable for salt extraction, most of this land was planted to paddy rice, sweet potatoes, sugarcane, peanuts, beans, and other crops. Also newly opened were over 6,200 mu of shrimp pools and fish-rearing pools, and over 12,000 mu were used for aquatic breeding in former harbor channels and for newly built saltworks. Last year the total output value of agriculture, fishery, and salt industry in the new reclamation area reached over 13.4 million yuan, thereby supplying to the state many agricultural and subsidiary products, stimulating the market, and increasing the peasants' income.

That our province last year obtained remarkable results in enclosing tideland along the coast for cultivation was mainly because the party and government at all levels strengthened the leadership over the work of enclosing tideland for cultivation, did things scientifically, developed the role of technical personnel at water conservancy projects, strengthened the management of projects, and put into effect the responsibility system. Although weather conditions last year were detrimental to the enclosing of land for reclamation projects, with many typhoons, big floods, and unusually high tides, which posed many difficulties for the enclosure projects; under the attention of the leaders concerned, the cadres, workers, and technicians engaged in this work made great efforts together, overcame the difficulties, and finally completed successfully the work of blocking harbors and enclosing tideland. For example, in the Fuqing Keyu and Pingtan Xingfu Yang reclamation projects, before the land was enclosed, the leadership made personal on-site inspections, repeatedly studied and formulated enclosure plans, and chose the most advantageous times for blocking harbors, and as a result the harbor blocking went extremely smoothly.

9727
CSO: 4007/276

EDITORIAL: STATE PLAN, GRAIN OUTPUT MUST NOT BE SLIGHTED

Fuzhou FUJIAN RIBAO in Chinese 9 Feb 82 p 1

[Editorial: "Uphold Planned Economy, Stabilize Grain Acreage"]

[Text] The "Beginning of Spring" [first solar term--5 February], has already passed and the rural communes and production teams are now getting a tight grip on the implementation of this year's planting plan. Herein lies a problem, viz, we must, according to the state plan, arrange well the acreage to be planted with grain this year.

We bring up this problem because, after various forms of the responsibility system were put into effect, some cadres and commune members seem to think that agricultural production does not need to be planned and that whatever they want to plant can be planted, so that there is a trend to further reduce the acreage planted with grain.

Everybody knows that the "Resolution on Certain Questions in the History of Our Party Since the Founding of the PRC," adopted by the 6th Plenary Session of the 11th CCP Central Committee, pointed out: "It is essential, on the basis of the public ownership of the means of production, to put into practice a planned economy and at the same time to give play to the supplementary role of market regulation." No matter what form of the responsibility system is put into practice, the agricultural economy must likewise put into practice a planned economy and must likewise make the planned economy primary and market regulation supplementary, and it definitely cannot disregard the state plan and develop freely. This indicates that in the current implementation of the planting plan we must accept the guidance of the state plan. The state must respect the right of the production teams to act on their own and must respect the interests of the peasants, and the peasants must act within the framework of the state plan. There are many people and little land in our province, with a provincewide per capita average of only 7 or 8 fen of cultivated land. In the past several years, although grain output has increased in successive years, generally speaking, the level of grain production is still relatively low, and, compared with the speed of the development of the national economy and the requirements for continually improving the people's life, it is still very unsuitable. The average per capita amount of grain is relatively small, and the arrangements in various aspects are relatively tight. Over the last 3 years, the internal structure of our province's agriculture has been reformed, and already the acreage planted to grain has been adjusted downward by over 2.2 million mu. This readjustment was completely necessary, and the economic effect has been marked. Now, the grain acreage must be stabilized and it cannot again be reduced. If the acreage were to again be reduced, this would cause a reduction in grain output, which would affect the stability of the state, the people's livelihood, and society. Leaders at all levels must be clear-headed on this point, and they certainly cannot treat lightly this important matter which affects the whole situation!

In stressing planning now, we do not want to change the policies since the third plenary session, and also we do not want to not engage in a diversified economy or to change the internal structure of agriculture. Our policy is still to not slack off in grain production while vigorously developing a diversified economy. Therefore, it is necessary to reform the internal structure of agriculture, and on this point no vacillation is allowed; but the total output of grain must increase on a stable basis, and we must insist upon this point. Between the two points there truly is a contradiction. Can the contradiction be resolved? It can. The fundamental orientation for resolving the contradiction lies in the mountains and the sea. Our province has many mountains and a vast sea. The mountains are "gold mountains" and the sea is a "silver sea." In our province, to study well the "mountain and sea classic" is a big question of a strategic nature. That is to say: in order to develop economic crops and to develop a diversified economy, we must fix our eyes on the natural resources of the mountains and the sea that have not been fully utilized, and we cannot just look at the cultivated land now available. As for the economic crops on the existing cultivated land, their per unit area yield and quality should be raised, and we cannot squeeze the grainfield acreage. With the exception of city suburbs and certain economic crop areas, in all other places the grain acreage must be stabilized. Grain-producing areas must continue even more to make hard efforts to develop grain production.

We must carry out socialist, patriotic education among the peasants so that they will uphold the economy and a stable grainfield acreage. Since the third plenary session, the party and government have put into effect a series of rural policies, all of which will enrich the country and the people and all of which are in the long-term interests of the peasants. That the state considers the interests of the peasants in this way means that the peasants should fulfill their obligations to the state and make more contributions to the state and that they cannot just choose methods that are of temporary advantage to themselves and disregard the state's fundamental interests. We must educate the peasants to give consideration to the interests of the state, the collective, and the individual and, according to the state's plan, by means of contracts, do a good job of planting grain and economic crops and rationally arrange the proportion of grain and economic crops planted.

To stabilize the grainfield acreage and insure a stable output increase of grain--this is the glorious task of the great number of cadres and commune members throughout the province, and they must concentrate their energy and go all out to do a good job of spring plowing and production. At present, in many areas the work of preparing for plowing and sowing has been inadequate, not much farm manure has been accumulated, the winter plowing and soil turnover was deficient, and many water conservancy works have not been timely reconditioned. Party committees and government at all levels must really strengthen leadership over spring plowing and production, give full play to the role of rural basic-level organizations, and get a good grip on all material preparation for spring plowing and win a victory in this battle of spring plowing.

9727
CSO: 4007/276

FUJIAN

FASTER WORK IN WINTER SOIL TURNOVER URGED

Fuzhou FUJIAN RIBAO in Chinese 9 Feb 82 p 1

[Article by Chen Benxiang [7115 2609 3276] et al.: "Intensify Soil Turnover To Greet Spring Plowing"]

[Text] According to statistics compiled by the provincial department of agriculture on 5 February, winter soil turnover throughout the province has been completed on over 6.5 million mu, which amounts to 81.5 percent of the fallow fields on which soil should be turned over. This work has been done a little faster than in the corresponding period of last year, but there is an imbalance between prefecture and prefecture, between county and county, and quite a few of them are lagging behind.

In Longxi Prefecture, winter soil turnover was fairly rapid, by 18 January this work had been basically completed on the acreage--over 935,000 mu--on which soil should be turned over. After the first winter soil turnover was finished on Longhai County's scheduled 135,000 mu of farmland, a second turnover was done on 10,000-odd mu. In this county, some communes and production teams located in mountains, this year are also using the method of piling up soil walls in order to dry the soil and promote weathering; some of them are fumigating the soil in order to raise its temperature. Before the year began, Guangze, Jiangle, Ninghua, Changting, Yongding, Shanghang, and Wuping counties had basically completed the task of winter soil turnover.

The common experiences of these prefectures and counties which did a good job of turning over the soil was that before the new year began they strengthened and perfected the production responsibility system, thereby stabilizing popular morale. For example 960 of the 982 production teams in Guangze County strengthened and perfected the production responsibility system. Next, the organization of the production brigades and production teams was overhauled and consolidated and the leading groups were strengthened, and therefore the cadres dared to grasp and manage the work and were bold in providing leadership.

Jiangang and Ningde Prefectures were comparatively slow in winter soil turnover. As of 1 February, Jiangang had completed half of its soil turnover and was 20,000 mu short of the acreage turned over in the corresponding period of last year. In Fuding and Fu'an Counties of Ningde Prefecture, soil had only been turned over on about 30 percent of the required acreage. The counties which had fallen behind were Mingxi County, which has only completed one-third of the work, and Changle County, which is 10,000 mu behind what it was in the corresponding period of last year. Among the reasons for the relative slowness in turning over soil in these prefectures and counties are that the production responsibility system has not yet been implemented and that among the peasants there exists the idea of looking on and waiting: some cadres of some communes and production teams in localities where the "double contract" [system of fixing output quotas based on households and system of peasant households assuming full responsibility for task completion] system has been put into effect think that the peasants themselves will do the work of winter soil turnover and they have slackened their leadership, and in particular some of the masses think that this year is a "year with an extra spring" and a leap month of April so that the seasons come slowly and there will still be time to turn over the soil.

A comrade of the provincial agricultural department thinks that although the golden season for winter soil turnover has already been missed, to plow now will still turn over the soil in good fashion compared to the time when there is more water in the fields, because there is still a certain time left to turn over the soil and let it weather and the farmwork can be staggered. But during the current plowing, attention must be paid to deep-plowing the originally plowed layer so as to avoid turning over immature soil and thus adversely affecting the growth of early-season rice. He hopes the prefectures in which the soil-turnover rate is slow will strengthen their leadership, getting a good grip on implementing the production responsibility system, on reorganizing the basic-level leading groups and organizing the commune members to concentrate their manpower, animal power, and farm machinery and tools on the work of turning over the soil in preparation for plowing and sowing, so that the necessary conditions will be created for wresting a bumper grain harvest this year.

9727
CSO: 4007/276

BRIEFS

SONGXI COUNTY RICE CROP--The peasants in Songxi County, Fujian Province, planted more than 120,000 mu of double-cropping early rice and afforested more than 33,000 mu of land this year, overfulfilling their tasks. [OW271111 Fuzhou Fujian Provincial Service in Mandarin 1120 GMT 26 May 82]

EARLY RICE--The Fujian Provincial Agricultural Department held a meeting 10-12 May in Fuzhou, attended by directors of prefectural and county agricultural bureaus, to discuss the work of early-rice planting in the province. It was pointed out at the meeting that this year's early-rice planting plan had not been fulfilled, and that as of the beginning of summer, only 9.74 million mu had been planted, a decline of some 700,000 mu compared with the same period of last year. Under these circumstances, the meeting urged, great efforts should be made to increase the total grain output by 300 million jin this year. Among other things, it called for attention to controlling possible rice diseases and insect pests. [OW161339 Fuzhou Fujian Provincial Service in Mandarin 1120 GMT 14 May 82]

YONGAN COUNTY FLOODS--On the evening of 10 May, Yongan County, Fujian, was hit by torrential rains and hailstorms rarely seen in many years. The waters cascading down from the mountains and spilling over from overflowing rivers inundated over 19,000 mu of rice fields, almost disrupted the harvesting of nearly 1,000 mu of vegetables, destroyed a number of bridges, highways and water conservancy facilities, tore down houses and injured or killed people and animals. In view of the disaster, leaders of county departments concerned have organized the people in the more seriously affected communes, production brigades, production teams, plants, mines and enterprises to carry out rescue, relief and repair activities. [Fuzhou Fujian Provincial Service in Mandarin 1120 GMT 15 May 82]

SPRING FARMING--Fujian Province has basically completed spring farming for this year. According to agricultural departments, as of 5 May the province had planted 9.5 million mu of early rice, 526,000 mu of soybean, 1.17 million mu of peanuts and 700,000 mu of sugarcane. This year the acreage planted to early rice is more than 500,000 mu less than last year. [OW191405 Fuzhou FUJIAN RIBAO in Chinese 8 May 82 p 3]

MARINE ECOLOGICAL RESEARCH--Xiamen, 27 May (XINHUA)--Chinese oceanologists will take an active part in international academic exchanges in marine eco-system and marine environmental protection under a plan announced at a recent special committee meeting on marine ecology of the Chinese Ecological Society. According to the plan, efforts will be organized to forecast the effect of human activity on marine eco-system, carry out research on controlled eco-system and on marine artificial biology, and tap measures to protect marine organism resources. Scientists who attended the meeting in this Fujian Province coastal city called for strengthening the research of primary marine productive forces. [Excerpt] [Beijing XINHUA in English 0721 GMT 27 May 82 OW]

COUNTY RAPESEED PROCUREMENT--Ninghua County, Fujian Province, has reaped a bumper harvest of rapeseed on 59,900 mu this year. As of 18 May, the county had procured 37,000 jin of rapeseed oil. [Fuzhou Fujian Provincial Service in Mandarin 1120 GMT 5 Jun 82]

SANMING PREFECTURE RICE--The acreage under early rice in Sanming Prefecture, Fujian Province, has been reduced by 120,000 mu because of a decision in spring to turn low-yield rice fields to the growth of single rice crops instead of double rice crops. At the same time, the prefecture's acreage under hybrid rice strains will expand from last year's 500,000 mu to more than 700,000 mu. [OW061337 Fuzhou Fujian Provincial Service in Mandarin 1120 GMT 30 May 82]

CSO: 4007/428

GANSU

PROVINCE SUFFERS FROM OVERRUNNING WEEDS

SK200658 Lanzhou Gansu Provincial Service in Mandarin 2200 GMT 18 May 82

[Letter written to the station's editorial department by (Ge Guangxin), senior agronomist and deputy director of the Provincial Agricultural Bureau, urging all localities to conquer overrunning weeds as early as possible]

[Excerpt] The letter notes: Now our province's spring sowing and plowing are nearing successful completion and summer hoeing has already begun. Adopting effective measures as early as possible to conquer overrunning weeds to promote the growing of crop seedlings is an important task for agricultural production. Our province has more lands but fewer residents; thus, the cultivation of farmland is extensive. In each of the past years, about 10 to 20 million mu of farmland were overrun with weeds, which affected agricultural production.

The province experienced more rainfall last year. Hejing and Mudanjiang prefectures were stricken by serious floods and waterlogging, interfering with timely weeding, plowing and banking soil to the growing crops in the summer. As a result, much farmland was overgrown with weeds.

According to an investigation made by the Huanan County Agriculture Department at (Jiancaogou) brigade in (Dabalang) commune, there are 3,000 to 8,000 grass seeds on every one square meter plot overrun with weeds. Since many plots were not cultivated and many grass seeds left on land last year and the soil moisture content is good this year in most areas, grass seedlings have grown on plots cultivated at an earlier date.

In line with an investigation of wheatfields at a seed multiplication farm in Huanan County, some 530 blades of small grass have grown on each one square meter plot, weeds outnumber crop seedlings and grass seedlings are growing. If we fail to promptly adopt measures to eliminate weeds, damages this year will be more serious than last year. All localities should pay attention to it.

CSO: 4007/422

BRIEFS

WHEAT PRODUCTION--Lintao County in Gansu Province has 520,000 mu of wheat, of which 25,000 mu is winter wheat; the wheat is growing well. Communes in the county are giving meticulous attention to wheat field management. [SK210842 Lanzhou Gansu Provincial Service in Mandarin 1125 GMT 20 May 82]

CSO: 4007/422

RICE INSTITUTE INAUGURATED IN GUANGZHOU

OW231218 Beijing XINHUA in English 1208 GMT 23 May 82

[Text] Guangzhou, 23 May (XINHUA)--An inauguration ceremony was held here on 22 May for the newly expanded Rice Research Institute under the Guangdong Provincial Academy of Agricultural Sciences.

Standing on the outskirts of the city, the Rice Research Institute has been upgraded with up-to-date apparatus. It will make researches on rice, which accounts for nearly half of China's grain output.

The predecessor of the Rice Research Institute was a rice experimental farm founded 50 years ago by famous Chinese rice expert Professor Ding Ying. The research results obtained by the institute in breeding low-stalk rice varieties have won recognition both at home and abroad. With 220 scientists and staff members, the institute will conduct research and tests for Guangdong and other southern China provinces.

The institute lays stress on research in applied techniques and development of production while strengthening studies in fundamental theories. It will help train scientists and technicians.

The institute will also conduct international academic exchanges.

It is equipped with atomic absorption spectrophotometers, apparatus for analyzing the properties of cereals and other up-to-date instruments.

Among the over 100 people attending the inauguration ceremony were Liu Xigeng, a representative of the Ministry of Agriculture, Animal Husbandry and Fishery, Fan Xixian, vice governor of Guangdong Province, and scientists and experts.

CSO: 4020/132

BRIEFS

PIG PRODUCTION INCREASES--According to the statistics compiled by the Guangdong Provincial Statistical Bureau, the number of pigs raised in the province in the first quarter of this year was some 21.83 million, 3.9 percent more than in the same period of last year; and the amount of pigs on hand in the first quarter of this year was some 19.35 million, 4 percent more than in the corresponding period of last year. Of these, the number of sows on hand, which were capable of breeding, was 16.7 percent more than in the same period of last year. The number of piglets on hand was 12.2 percent more than in the corresponding period of last year. The number of pigs sold in the first quarter of this year was 94,700 more than in the same period of last year, an increase of 4 percent. [HK191453 Guangzhou Guangdong Provincial Service in Mandarin 2350 GMT 10 May 82]

HAINAN AGRICULTURAL LOANS--Agricultural banks and credit cooperatives in all places in the Han areas in Hainan region have issued loans to commune members to develop agricultural production. They issued loans of some 32 million yuan to individual commune members from January to April this year. This amount accounted for 55.5 percent of the total amount of agricultural loans in the same period and was 32.9 percent more than in the corresponding period of last year. With these loans, peasant households can buy seeds, chemical fertilizers, draft cattle, agricultural machinery and tools. [Haikou Hainan Island Service in Mandarin 0330 GMT 24 May 82]

HAINAN ENTERPRISES FINANCIAL INSPECTION--Hainan region has conducted a large-scale inspection of the finances of state-run enterprises in its Han areas. According to incomplete statistics, by the end of April, cases in violation of financial discipline, involving 2.494 million yuan, had been discovered and 518,000 yuan of this amount had been submitted to the treasury. This year, the Hainan administrative commissioner's office twice issued instructions on conducting a large-scale inspection of the finances of the state-run enterprises throughout the region. The regional administrative commissioner's office and all county people's governments have set up large-scale leadership groups for inspection of enterprise finances. [Haikou Hainan Island Service in Mandarin 0330 GMT 11 May 82]

SPRING-HARVESTED CROPS--All places in Guangdong Province have completed harvesting of spring-harvested crops. According to statistics, the province's total output of spring-harvested crops was 1.173 billion jin, 2.18 percent more than last year. Output of soybeans increased by 20 percent, output of tobacco increased by over 10 percent and output of vegetables also greatly increased. [HK260927 Guangzhou Guangdong Provincial Service in Mandarin 2350 GMT 25 May 82]

CSO: 4007/422

BRIEFS

WINTER TOBACCO HARVEST--Nanning, 24 May (XINHUA)--The quality of the 636,600 dan winter tobacco harvested this year in Guangxi is the best ever harvested by the peasants. [OW250431 Beijing XINHUA Domestic Service in Chinese 0051 GMT 24 May 82]

SUGARCANE PRESSING--In the 1981-1982 sugarcane-pressing season, Guangxi region pressed some 4.18 million tons of sugarcane, some 830,000 tons more than in the preceding sugarcane-pressing season, an increase of 24.77 percent. The region manufactured some 490,500 tons of sugar, some 69,500 tons more than in the preceding sugarcane-pressing season, an increase of 16.5 percent. Because sugarcane production increased in this sugarcane-pressing season, sufficient raw materials were supplied for the production of alcohol. In this sugarcane-pressing season, output of alcohol reached some 11,200 tons, 41.9 percent more than in the preceding sugarcane-pressing season. [HK240354 Nanning Guangxi Regional Service in Mandarin 1100 GMT 13 May 82]

GRAIN PRODUCTION--According to a recorded talk by (Yu Yunhong), vice chairman of the Guangxi Regional Agricultural Committee, the region's total output of grain in 1981 was 1.6 times greater than in 1950, an average increase of 3.2 percent each year. Even if this is so, we must by no means disregard and relax production of grain. We must make grain production develop steadily. At present, this region has not yet solved the problem of adequate grain production. Generally speaking, to solve the problem of adequate grain production, each person should produce an average of over 1,000 jin of grain; to basically solve the problem, each person should produce an average of 800 jin. At present, each person in this region produces an average of some 670 jin of grain. With this output, the region will not be able to meet the needs in times of serious natural disasters or other emergencies. The region must therefore strive to develop grain production. [HK061501 Nanning Guangxi Regional Service in Mandarin 1100 GMT 5 May 82]

COMMERCIAL GRAIN BASES--The Guangxi regional conference on the work of commercial grain bases which is being held by the regional CCP Committee and the regional people's government opened on 8 May. The conference pointed out that, since 1980, the 150 communes in this region which have built 184 commercial grain bases, have initially achieved good results. In 1980, the majority of these communes increased production and the arable land covered by the bases accounted for 22 percent of the region's total area of arable land. These bases' output of grain was 257.94 million jin, 74 percent of the region's output of grain. In 1981, despite serious natural disasters, some communes with commercial grain bases increased production. In 1981, the arable land of these commercial grain bases accounted for 27.2 percent of the region's total area of arable land. The communes with commercial grain bases have also developed diversification. Over the past 2 years, these bases have produced 319,500 tons of sugarcane, an increase of 28.3 percent and increased the number of draft cattle by some 16,000 head, an increase of about 2 percent. The number of pigs in these bases in 1981 was 260,000 head more than in 1980, an increase of 9.6 percent. In 1981, the state invested some 56 million yuan in water conservation projects in these bases and this investiment was 46.8 percent of the total investment in water conservation projects in the whole region. [HK191333 Nanning Guangxi Regional Service in Mandarin 1100 GMT 9 May 82]

METEOROLOGICAL FORECASTS--Under the influence of atmospheric circulation, Guangxi region had natural disasters, such as hailstorms, strong wind, a spring cold wave and extraordinarily torrential rain, one after another and incurred serious losses. In the next few months, the region may possibly have natural disasters, such as drought, floods, strong wind and low temperatures. All places must make good preparations against natural disasters and do everything possible to reap a bumper agricultural harvest this year. According to the analysis of the regional meteorological department, from May to October this year, the main natural disasters will be drought, floods, strong wind and low temperatures. In May, the region may possibly have three to five hailstorms. In the second half of this year, the region may have tornados, thunder-storms in some areas and strong winds. It is estimated that between June and August this year, it will rain more in this region and floods may occur. In September and October, it will rain less in the north and the central parts of the region and there may be drought. [HK130717 Nanning Guangxi Regional Service in Mandarin 1100 GMT 7 May 82]

CANE SUGAR--Nanning, 14 May (XINHUA)--The Guangxi Zhuang Autonomous Region, a major cane sugar producer, has produced more than 500,000 tons of cane sugar, an alltime high, in the 1981-82 refining year, according to the regional light industrial department. The increase resulted from the peasants' higher enthusiasm for sugarcane planting under the responsibility system and the growth of the crop on an additional 17,300 hectares, the department said. In the current refining year, sugarcane supplied to the region's sugar refineries came to 4.24 million tons, an increase of 24.8 percent over the previous refining year, the department said. In an effort to expand the sugar refining capacity, the region has completed 12 refineries since 1978, thus adding a daily refining capacity of 7,500 tons to the total. Last year, 22 refineries went through technical transformation, adding a daily refining capacity of 4,700 tons to the total, the department reported. [OW201025 Beijing XINHUA in English 1207 GMT 14 May 82]

SUGAR PRODUCTION IN GUANGXI--Guangxi Zhuang Autonomous Region has broken historical records for sugar production. By the end of the most recent season, it had produced 500,000 metric tons of sugar. In order to expand its sugar cane processing capacity, Guangxi has built 12 new automated sugar mills since 1978. It thereby increased its daily cane pressing capacity by 7,500 metric tons. Last year the autonomous region renovated 22 automated sugar mills, increasing its processing capacity by more than 4700 metric tons. [Text] [Shenyang LIAONING RIBAO in Chinese 19 May 82 p 4]

CSO: 4013/92

AGRICULTURE OFFICIALS WAGE PROPER CARE FOR WHEATFIELDS

Shijiazhuang HEBEI RIBAO in Chinese 14 Mar 82 p 1

[Article: "Energetic Action in Caring for Intermediate Yield Region Wheat, Which Holds Greatest Potential for Increased Yields. Comrades in Charge at Provincial Agriculture Bureau Make Statement on Doing a Good Job of Wheatfield Care"]

[Text] Recently, comrades in charge at the Provincial Agriculture Bureau made the following remarks about the issue of doing a good job of wheatfield care.

The emphasis in wheatfield care should currently be placed on care of intermediate yield wheat producing areas where the greatest potential for increased yields exists. By intermediate yield areas is meant principally wheatfields with yields ranging from 300 to 600 jin per mu. Such areas account for 51 percent of the province's total grainfield area, and account for 48.8 percent of the province's total grain output. They are characterized as follows: Production conditions are fairly good, the irrigated area averaging 1.26 mu per capita. They are similar in this way to high yield areas, but soil fertility is poor, and levels of production techniques comparatively low. All that is needed is to focus attention on them, and their potential for increased yields will be very great; results will show quickly; and the grain production situation can be mastered.

Recently we assembled comrades from five representative intermediate yield counties to talk about the issue of wheat care in intermediate yield counties. In these intermediate yield counties, wheat yields fluctuate around an average 2000 jin or so per mu. Wheat yields per unit of area may vary by as much as 100 jin between a bumper year and a meager year; yields are low and inconsistent. The main reasons by these intermediate yield area's output cannot be made to rise very rapidly are, first of all, insufficient soil fertility. A look at survey data from 14 intermediate yield wheat growing counties in which soil surveys have been completed shows a soil organic content of only 0.7 to 1 percent; total nitrogen to be 0.05 to 0.08 percent, and quick acting phosphate to be only between 3.3 and 8.6 parts per million, or a general 5 parts per million. Not only does it lack nitrogen, but it is seriously deficient in phosphate. Second is the amount of fertilization is little. The quantity of coarse organic fertilizer used has not increased for many years. Amount of nitrogenous chemical fertilizer used averages only 50 jin per mu of wheatfields, about 50 jin less than for high yield wheat growing areas. The amount of phosphate fertilizer used is also very little. Representative sampling shows the area of this kind of wheatfield fertilized with phosphate fertilizer amounts to less than 30 percent of the total wheatfield area. Phosphate fertilizer applications average less than 10 jin per mu, and sometimes only 3 to 5 jin per mu. Third is the slapdash care of poor quality manifested in failure to sow seeds, irrigate, apply top dressings of fertilizer, hoe and rake, or eradicate insects on time. For these reasons, the intermediate wheatfield area produces little tillering, and a reduced number of mature heads, the number of heads averaging about 200,000 per mu, which is from 100,000 to 200,000 fewer heads than from high yield wheatfields.

In order to come to grips with wheatfield care in intermediate fields, in light of the existing major technical problems existing at the present time, emphasis should go to the following key measures.

First is equitable distribution of chemical fertilizer, emphasis going to the fertilization of intermediate yield wheatfields. According to fertilizer experiments conducted by the Provincial Agriculture Crop Institute on wheatfields with different levels of yields, when 1 jin of chemical fertilizer per mu was applied to fields with yields of less than 300 jin per mu, yields increased by 3.7 jin. For wheatfields with yields of between 300 and 600 jin per mu, 1 jin of chemical fertilizer increased wheat yields by 2.3 jin. For wheatfields bearing yields of more than 600 jin, 1 jin of chemical fertilizer meant an increase in yields of only 0.3 jin per mu. Similarly, 1 jin of chemical fertilizer used on an intermediate yield wheatfield can bring a wheat yield of 2 jin more than if used on high yield wheatfields. If 15 more jin per mu of chemical fertilizer could be applied to intermediate yields, the province's 20 million mu of intermediate yield wheatfields could produce 600 million jin more of weat. When heavy early fertilization of intermediate yield wheatfields for greening-up was stressed, results were better than from application of fertilizer for jointing.

Next, attention to use of nitrogenous and phosphate fertilizers in proper proportions. The soil in intermediate yield wheat growing areas are seriously phosphate deficient, and results achieved from fertilization with phosphate are extremely remarkable. In places that have not been fertilized with phosphate base fertilizer or seed fertilizer, in particular, attention should be especially given to increased phosphate fertilization, but fertilization with a mixture of nitrogenous and phosphate fertilizer. Now is the time to combine irrigation for greening up with top dressings of phosphate and nitrogenous fertilizer.

Third is full use of existing water sources, making full advantage of increased benefits in production from water conservancy facilities. This year the weather is dry and soil moisture conditions in wheatfields are bad. Much attention must be devoted to irrigation. First should be a general watering for greening up. Effort should be made to make a total of three or four waterings. The former method of heavy watering at the outset and a slackening off at the end should be changed.

Fourth is timely care to assure quality. This requires, first of all, prompt hoeing and raking, hoeing and raking being intensified on wheatfields with a hard, cracked surface to conserve soil moistuer and increase warmth. Following watering, the wheat should be hoed at the right time, and for late growing and feeble wheatfields hoeing and raking is of primary importance to increase temperature and conserve soil moisture for the promotion of root growth. Second is spraying with phosphorous. At the time of flowering, spraying should be done using potassium dihydrogenphosphate to meet need for the element phosphorous during the flowering period. Third is prevention and control of wheat aphids done in combination with the spraying of phosphorus. Fourth is watering the wheat with Huang Shui [7806 3055] to guard against hot, dry winds.

9432
CSO: 4007/336

FIGURING AMOUNT OF GOODS OR FUNDS OWED TO COLLECTIVE

Shijiazhuang HEBEI RIBAO in Chinese 10 Mar 82 p 2

[Article: "How To Set Commune Member Payments for Collective Withholdings Following the Contracting of Work Tasks to Individual Households"]

[Text] How to set fixed amounts of products to be paid to the collective by commune members in production teams that have instituted a responsibility system of contracting work tasks to individual households is a major component in the perfection of responsibility systems. The equitability of amounts paid has a bearing on the major matter of whether the relationship among the state, the collective, and individual commune member can be handled correctly. Since specific situations of land, population, outputs, fixed procurement quotas, income, and indebtedness vary from one production team to another, the amount to be paid will also differ, so that is the proper amount to be paid? It has to be set after totaling the balance sheets.

First an equitable amount of collective consumption and collective accumulation has to be set. Following the contracting of work tasks to individual households, collectives must continue centrally to manage and distribute a certain amount of products and funds, using them to assure state requisition procurement and revenues, and to assure collective consumption and accumulation. The items and quantities for collective consumption require the figuring of two different accounts, namely the grain consumption account and the funds consumption account. Grain consumption includes, seeds and grain for livestock feed; grain allowances for cadres, livestock feeding personnel, teachers in civilian operated schools, electrical workers, and barefoot doctors; grain for the care of households enjoying the five guarantees [children and infirm old persons who are guaranteed food, clothing, medical care, housing and burial expenses by the people's communes], dependents of martyrs and servicemen, and hardship households; and grain assistance given those sent elsewhere to work. Funds consumption includes money for grain consumption, production expenses uniformly paid in cash, management expenses, property depreciation expenses. In order to take further advantage of the superiority of the collective economy, following the contracting of work tasks to individual households, a certain amount of accumulation has to be retained. Before contracts are signed, this amount should be set on the basis of policies enacted by superior authorities in combination with the actual circumstances of the production team, the amounts for collective grain consumption, funds consumption, and accululation being decided upon one by one.

Second is calculation of centrally managed allocations of goods and sources of funds, income being balanced against outgo in a preliminary test calculation of the amounts of goods and funds that commune members will be required to pay. Following the contracting of work tasks to individual households, some production team collectives retained a small portion of land held in reserve for emergency use, and scattered plots of unused land, and they retained some economically diversified projects. These were generally contracted to the work force on specialized contracts. In this way, goods allocated under central management of the collective came from payments made by commune members contracting work tasks and from payments from specialized contracting. Funds allocated under central management came from the conversion into money of goods paid by commune members contracting work tasks, from payments out of net earnings from specialized contracting in farming, forestry, animal husbandry, sideline occupations, and fisheries, and from funds allocated by communes and brigades. By balancing income from sources of funds against expenditures of funds for use, it is possible to make a preliminary calculation of the quantity of goods and funds commune members will be required to pay. Some formulas illustrate this point.

Payment of goods (such as grain, cotton, and edible oil) from the contracting of work = state requisition procurement + collective consumption - payments from specialized contracting.

Funds paid from contracting for work = taxes + collective consumption = collective accumulations - net income payments from various specialized contracting.

Third, the products (grain, cotton, and edible oil) that should be paid by commune members converted into money terms are compared with the funds to be paid. Results of such a comparison can show three circumstances. First, payment of funds as the monetary value to payment with goods. This shows that the goods paid by commune members, no matter whether distributions in the form of actual goods or distributions in the form of value can be assured for the state or retained in sufficient amounts for the collective. When the total of the various goods to be paid are divided by the population (or the total land contracted for work), the amount of goods that each person (or each mu of land) should pay the collective is derived. Second, when the monetary value of the various goods paid is less than funds paid. This shows that in paying goods in this way, only distributions in the form of actual goods can be assured the state and sufficient amounts kept for the collective. However, the country has no assurance of distributions in the form of value and the collective will be unable to retain sufficient amounts. Under these circumstances, the funds shortfall will have to be converted to increased quantities of grain, cotton, and edible oil paid, so that the monetary value of goods paid will be equal to funds paid. Third is when the monetary value of various goods paid is greater than funds paid. This shows that when goods are thus paid, distributions in the form of actual goods may be assured the state and sufficient retention guaranteed the collective; moreover, there will be a surplus of distribution in the form of value of the funds paid. Under these circumstances, the quantity of goods paid cannot be reduced; reduced distributions in the form of actual goods cannot be carried out. Surplus funds may be converted into a certain quantity of goods and proportional payments of cash made to individual households.

9432
CSO: 4007/336

BRIEFS

SPRING RAINFALL--Most areas of Heilongjiang Province experienced spring rainfall from 1 to 4 May. Longjiang, Gannan, Tailai and Fuyu counties of Nenjiang Prefecture and Qigihar Municipality had heavy rainfall measuring 20 to 57 millimeters. The northern area of Heihe Prefecture and the central area of Nenjiang Prefecture had moderate rainfall measuring 12 to 19 millimeters. The rest of the province had rainfall under 10 millimeters. Drought in the southern area of Nenjiang Prefecture and the southwestern area of Suihua Prefecture has been alleviated. However, drought still exists in Zhaodong, Zhaozhou and Zhaoyuan counties. Waterlogging in the eastern area of Hejiang Prefecture is worsening. [SK060856 Harbin Heilongjiang Provincial Service in Mandarin 2200 GMT 5 May 82]

PROVINCIAL FLOODS--According to an analysis of past flood cycles, water will still be abundant in the major rivers of Heilongjiang Province this year, and some rivers will possibly bring comparatively greater floods. According to statistical data, there were great floods in the rivers in northern China in the few years after the great floods in the rivers in southern China. For instance, the Chang Jiang had floods in 1930 and 1931 and Songhua Jiang had a flood in 1932. Chang Jiang and Huang He had floods in 1954, and then Songhua Jiang again in 1957. Since there were floods in Chang Jiang and Huang He in 1981, there may be great floods in the province in the following few years. According to the Central Weather Bureau, this year in most areas of the province precipitation will be 10 to 30 percent above normal. In southeastern areas, precipitation will be 20 to 30 percent above normal. In the eastern part of the province, plagued by waterlogging last year and which had rather abundant rainfall this spring, there may be continued and worsen waterlogging to cause disasters if heavy rain falls this year. [SK201007 Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT 19 May 82]

BEET SUGAR--Harbin, 18 May (XINHUA)--Heilongjiang Province, China's leading beet sugar producer, produced 365,000 tons of beet sugar in the 1981-82 pressing season, recording an alltime high, according to the provincial light industrial department. The figure represents a 15.5 percent increase over the previous season. The department attributed the increase to the policy of encouraging peasants to grow sugar beets and to a rise in the purchase price. Last year, 42 of the province's 64 counties produced 3.36 million tons of sugar beets, the department said. In an effort to expand the sugar refining capacity, the province has completed two new sugar refineries, and transformed and expanded 10 others, thus adding an annual refining capacity of 82,000 tons to the total. [Text] [OW201023 Beijing XINHUA in English 1203 GMT 18 May 82]

CSO: 4020/132

BRIEFS

WHEAT PRODUCTION MEETING--With the approval of the Henan Provincial People's Government, the Provincial Agricultural Committee held a meeting on inspection and assessment of wheat production, which lasted 6 days and concluded in Nanyang on 17 May. Responsible comrades of agricultural departments of all prefectures and municipalities and experts in wheat discussed the summer grain production situation in the province, looked into and arranged for summer farmwork and summed up experiences in wheat production. The meeting demanded that leaders at all levels formulate the programs for next year's wheat production. The meeting also demanded that leadership organs at all levels improve work style, reduce the number of conferences to a minimum and send a large number of cadres to grassroots units to help them solve practical problems in the course of production. [HK251429 Zhengzhou Henan Provincial Service in Mandarin 1100 GMT 20 May 82]

ZHOUKOU PREFECTURE COMBATS DROUGHT--Zhoukou Prefecture has taken an active part in combating drought and protecting wheat and spring-sown crops. Since the beginning of April, the drought situation in this prefecture has become more and more serious. Of the 7.2 million mu of wheat throughout the prefecture, 3.5 million mu of wheat has been seriously affected by drought. Because of the drought, the prefecture has been unable to sow some of its late fall harvested crops. To ensure the normal growth of wheat and spring-sown crops, the prefectural CCP Committee and the administrative commissioner's office promptly held various conferences, demanding that the cadres and the masses throughout the prefecture take effective measures and go all-out to combat drought. Relevant departments must vigorously support them materially and technologically to combat drought. At present, the prefecture is using 11,000 diesel engines, 4,500 motors, 1,900 irrigation sprinklers and 350,000 small agricultural machines and tools to combat drought. Fugou County has irrigated 290,000 mu of wheat. By 4 May, the prefecture had sown late fall harvested crops over 2.15 million mu and irrigated wheat over 1.1 million mu. [HK191335 Zhengzhou Henan Provincial Service in Mandarin 1100 GMT 8 May 82]

CSO: 4007/422

BRIEFS

PIG OUTPUT--Wuhan, 19 May (XINHUA)--Hubei Province had 13.61 million pigs by the end of March, an increase of 600,000 over the same period last year. The number of pigs in the province began a downward trend last year because of lack of fodder following the serious flood disaster in 1980. In view of this, the province took a number of effective measures to promote pig production, including distributing land to production teams for growing fodder. These measures are instrumental to the rise of pig production. [Beijing XINHUA Domestic Service in Chinese 0044 GMT 19 May 82]

PIG PROCUREMENT--At the Hubei provincial conference on pig production on the afternoon of 24 May, Huang Zhizhen, provincial CCP Committee secretary and vice governor, talked on the procurement of pigs, stressing that it is now the busy season for commune members to sell pigs to the state and relevant departments must not stop procuring pigs or limit the number of pigs procured. Relevant departments must also not temporarily leave behind, in the houses of commune members, the pigs which have been procured. Thus, we can protect commune members' enthusiasm for selling pigs to the state. The number of pigs raised and procured this year is more than that last year. [Wuhan Hubei Provincial Service in Mandarin 1100 GMT 25 May 82]

CSO: 4007/422

BRIEFS

RAPESEED HARVEST--A bumper rapeseed harvest has been reported from Yueyang Municipality, Hunan Province. The 105,000 mu of rape in the municipality produced 187,000 dan of rapeseeds, a 70 percent increase over the 1981 output. [OW061243 Changsha Hunan Provincial Service in Mandarin 1100 GMT 31 May 82]

BARLEY PRODUCTION--Changsha County, Hunan Province, harvested 873,000 jin of barley from 3,800 mu last winter. [Changsha Hunan Provincial Service in Mandarin 1100 GMT 31 May 82]

COMMUNE, BRIGADE ENTERPRISES--After the readjustment, rectification and improvement of their management, commune and brigade enterprises in Hunan Province have tapped potential and carried out technical innovation and modification. As a result, they have greatly improved their economic returns. Last year, the labor force of commune and brigade enterprises throughout the province accounted for 7 percent of the total labor force of the rural areas and the income derived from their output accounted for 29 percent of the total income of the rural areas and was some 57 million yuan more than in 1980. Each 100 yuan of fixed assets of commune-run industrial enterprises made a profit of 11.5 yuan and each 100 yuan of circulating funds made a profit of 49.5 yuan. [Changsha Hunan Provincial Service in Mandarin 2310 GMT 8 May 82]

CSO: 4007/422

WEATHER REPORTING SERVICE ESTABLISHED FOR SPRING PLANTING PERIOD

Beijing RENMIN RIBAO in Chinese 18 Mar 82 p 2

[Article: "Jiangxi Provincial Meteorology Bureau Begins Meteorological Service for Spring Sowing. Helps Peasants Promptly Understand Weather Changes"]

[Text] Recently the Jiangxi Provincial Meteorology Bureau held a symposium on meteorological service for spring sowing attended by meteorology station chiefs and professional personnel and research personnel concerned from the province, prefectures, and municipalities. The symposium took up the subject of how to do a good job of meteorological service during spring sowing this year, making a comprehensive study of and working out actions to be taken on weather, climate, and agricultural meteorology.

Provincial, prefectural, municipal, and county meteorology bureaus set up spring sowing meteorology service teams headed by a bureau leader and staffed by technical mainstay cadres for forecasting, agricultural meteorology, and climate. The Provincial Meteorological Bureau required each meteorology station and post to statisticalize the frequency of disastrous weather, its route, its intensity, and the extent of damage done during the spring season (March-May) over the years in their local prefecture and county, the work to be completed before mid-March. This information was to be plotted on maps and charts for display outside forecast offices so that every forecaster would have a mental conception. When disastrous weather is in the offing, all posts and stations are to give strict attention to weather changes, set up 24-hour watch teams, and promptly organize technical mainstay cadres to hold consultations on the weather to make sure that no failures occur in reporting. The county bureau is to allocate a certain force to go into the frontlines of production to set up service liaison points in areas having different kinds of crops.

Jiangxi Province has established a meteorological service and intelligence network in three fields. One is a disastrous weather watch network in which the provincial meteorological stations and posts all participate. The second is a representative agricultural meteorology intelligence network set up by 20 county meteorology bureaus. Third is the radar monitoring network that includes weather radar installations at Nanchang, Jinggangshan, and Zhangzhou.

Right now the Jiangxi provincial meteorological system is in process of giving widespread publicity to spring sowing meteorology. They use publicity media such as newspapers, broadcasts, and television, and they publish various kinds of small meteorology papers. They have set up meteorology publicity signboards in country fair markets, making all possible efforts to transmit to the broad peasant masses spring sowing weather forecasts and agricultural meteorology intelligence so that they can promptly understand weather changes and use the science of meteorology to plan, plant, and care for their responsibility fields.

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CSO: 4007/336

BRIEFS

GANZHOU PREFECTURE RAPESEED--Ganzhou Prefecture, Jiangxi Province, has reaped a bumper harvest of rapeseed with total output exceeding 221,000 dan, or 63.6 percent more than in 1981. Harvesting of rapeseed in Jiangxi's Shangrao Prefecture is near completion. It is estimated that the prefecture's total rapeseed output will reach 583,577 dan, or an increase of 13.73 percent over 1981. [Nanchang Jiangxi Provincial Service in Mandarin 1100 GMT 25 May 82]

CSO: 4007/422

BRIEFS

YANJI COUNTY ANTI-DROUGHT--Jilin Province's Yanji County has been hit by a relatively serious drought this spring. To counter it, leading comrades of the county CCP Committee and people's government led the masses to seize the opportune time to conduct spring plowing and sowing. Over 40 percent of arid farmlands have been sown. [SK031033 Changchun Jilin Provincial Service in Mandarin 1100 GMT 2 May 82]

CSO: 4007/422

FIELD CROP SOWING COMPLETED

SK160847 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 15 May 82

[Text] According to our contributing reporter (Zhou Jinqiang), the sowing of field crops has been basically completed throughout the province. According to statistics compiled on 13 May, 88.2 percent of the planned acreage for field crops were sown. The sowing of field crops has been finished in all areas except for a few places in the western and southern parts of the province where the sowing is not yet finished due to serious drought.

This year, the sowing of field crops has taken place under a serious drought. In the face of the drought, the broad masses of commune members and cadres in various localities [sentence indistinct] have tried in every possible way to combat drought. Chaoyang Prefecture made the best use of soil moisture to sow field crops. [Sentence indistinct] When the drought was alleviated somewhat as a result of two propitious rainfalls, commune members went all out to set off an upsurge in spring sowing and thus accelerated the tempo of that work.

While mapping out farming plans, all localities paid attention to readjusting the grain-growing acreage and properly arranged the acreage sown to cash crops and maize under the prerequisite of stabilizing the grain areas. Compared with the corresponding 1981 period, maize-growing acreage in the province decreased some 2 million mu and sorghum growing acreage increased 1.17 million mu. In Jinzhou, Yingkou and Liaoyang municipalities and in Chaoyang Prefecture, some 697,000 mu of cotton were sown, exceeding the plan by 16.3 percent.

The province has also made progress in scientific farming this year. The vinyl-covered areas for growing peanuts, cotton, tobacco and vegetables totalled 292,000 mu, 4.3 times that of 1981. This year, Fushun Municiplaity has made arrangements for eight scientific experimental items for growing paddy rice, soybean, millet and peanuts. The acreage sown to [words indistinct] of soybean on experimental basis is over 200,000 mu, accounting for 70 percent of all soybean fields.

The transplanting of rice seedlings is in full swing in the province. According to statistics, Shenyang and Yingkou municiplaities and Donggou and Fushun counties transplanted some 300,000 mu of rice seedlings as of 13 May.

CSO: 4007/422

BRIEFS

INSECT PESTS--Since late April, insect pests have been reported in farmlands and orchards. This has aroused the attention of departments concerned. Steps have been taken to eliminate them. A certain moth spread over 1.1 million mu of mountainous area in Liaoyang County. Scarabs have been discovered in some communes in Jin County. [Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 17 May 82]

PROVINCE PROFITS FROM AFFORESTATION--The Liaoning Provincial CCP Committee and the people's government convened a forum on developing the province's eastern mountainous areas 7-12 May in Fushun. Forum participants contended that great progress has been achieved in the implementation of the policy of comprehensive development with stress on forestry in the eastern mountainous areas. Practice has shown the correctness of this policy. In the future, we must persistently implement it. During the past 3 years, about 1 million mu of trees were planted in the eastern mountainous areas. Consequently, water and soil have been better conserved. Grain output has stabilized at 2 billion jin or more. Grain rations of commune members have increased to 489 jin from 435 jin. As the collective economy has increased continuously the per capita income has increased from 91 yuan to 116 yuan. [SK201012 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 18 May 82]

COUNTY SEEDLING GROWING--Liaoning Province's Changtu County was stricken by drought and low temperatures in the late stage of spring sowing and plowing this year. According to an investigation made by the county agriculture department, seedlings on 200,000 mu of cornfields are poorly developed and are third grade seedlings. If we fail to adopt remedial measures, the county may suffer a reduction of grain output by 110 million jin. To counter this, the county CCP Committee and the people's government invited agronomists and agricultural technicians to discuss ways to promote and accelerate the growing of third grade seedlings. Now some 170,000 laborers are joining this task. Some 39 million mu of field crops have been replanted, 280,000 mu have been banked and 360,000 mu have been leveled. [SK242210 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 23 May 82]

COTTON PRODUCTION--Chaoyang Prefecture in Liaoning Province had cultivated 272,000 mu of cotton by 15 May, overfulfilling the state plan by 43.3 percent. [Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 19 May 82]

PROVINCIAL RAINFALL--Being without any heavy rainfall in the past 30 months, Chaoyang Prefecture, Liaoning Province, had two heavy rainfalls on 27 April and on 2 to 4 May. Spring sowing is in full swing as soil moisture is sufficient. Over 400,000 mu of farmlands are sown in the prefecture every day. [SK070514 Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 6 May 82] Rain fell in most of Liaoning Province from the night of 18 May. As of 1400 on 19 May, Kuandian County had 37 millimeters of rain. Precipitation in Tianling Prefecture, most of the Dandong area and the eastern part of Benxi area ranged from 11 to 18 millimeters. Other areas had rainfall totalling 4-10 millimeters. The Dalian area and most of Jinzhou had only 1-3 millimeters. This rain is beneficial to the seedling emergence of field crops and the growth of vegetables. However, due to scanty rainfall, drought in the southern part of the province remains serious. [Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 19 May 82]

CSO: 4007/422

BRIEFS

CASH CROP--Ulanquab League in Nei Monggol region has expanded its seasame sowing acreage to 1.71 million mu in 1982, an increase of 400,000 mu over the previous year. [Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 23 May 82]

SHEEP BREED--A new breed of sheep, developed by livestock scientists in Nei Monggol after 30 years of efforts, has passed an acceptance test by a relevant state department and was designated by the regional people's government as Aohan thin-hair sheep. Now the region has 300,000 head of such. Last year the region sold 7 million jin of wool of these sheep to the state. [SK262233 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 25 May 82]

RURAL CONSUMPTION--Supply and marketing departments have organized great qualities of manufactured goods to rural areas. During the first 4 months, they supplied means of agricultural and livestock production worth 78 million yuan and daily necessities worth 390 million yuan. These are increases of 16.9 and 7.5 percent respectively over the corresponding 1981 period. Peasants and herdsmen in rural areas have shown unprecedented enthusiasm in purchasing means of production. By the end of April, 256,100 tons of chemical fertilizer had been sold in the region, up 19.9 percent over the corresponding 1981 period. Some 3.68 million small farm implements had been sold, an increase of 34.1 percent over the corresponding 1981 period. [SK220901 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 21 May 82]

REGION HELPS BACKWARD AREAS--The Nei Monggol Regional People's Government decided to allocate 30 million yuan from the state funds which were appropriated to the region for developing economically backward areas in 1982 to help old revolutionary bases, mountainous areas, remote areas, pastoral areas and backward areas develop production. This fund will be used this year to establish 10 rejuvenating forest areas, six banners, counties and communes that can ensure a comprehensive development of agriculture, animal husbandry and forestry and four collectively-owned mechanized agricultural and livestock farms and to help minority people raise animals. Hohhot Municipality and Ih Ju, Ju Ud, Bayannur and Alxa leagues have also donated 4 million yuan to support this work. [SK242212 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 23 May 82]

MARKETABLE GRAIN BASE--Ju Ud League in Nei Monggol region has decided to build a 4-million-mu key marketable grain base managed by 600 brigades in (Chengchuan) District. It is expected to raise the per-mu yield from 300 jin to 400 jin to achieve a grain output of 1.6 billion jin in 1985, which will be 66 percent of the league's total. [Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 23 May 82]

ARTIFICIAL RAIN--In support of Nei Monggol's drought combat work, the State Council and the Military Commission of the CCP Central Committee on 11 May dispatched planes to make artificial rain in areas between Qilian County in Qinghai and Togtoh County in Nei Monggol. The artificial rain is conducive to the agriculture of Nei Monggol's Tomochuan areas. [SK201010 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 18 May 82]

COLD SPELL--Nei Monggol Regional Meteorological Observatory released a forecast of strong winds and cold weather at 1700 on 14 May. A cold spell will move into the region on the early morning of 15 May. Most areas in the central and eastern parts of the region will be hit by 7 to 8-class strong winds and will experience a slight or medium amount of rain and snowfall. From the afternoon of 15 May to 17 May, temperatures will drop 8 degrees. Other areas in our region will be hit by a 6-class wind. [SK172202 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 14 May 82]

REGIONAL RAINFALL--On 11 May, light to moderate rains fell in central and western areas and heavy rains fell in a few areas of Nei Monggol region. Even the southern area of Alaxa League and western Ih Ju League, which had very little rains last year, had 7 to 18 millimeters of precipitation on 11 May. Hulun Buir, Xingan, Jirem, Ju Ud, Xilin Gol and Ulanqab leagues and Hohhot, Baotou and Wuhai municipalities have enough soil moisture. Drought in other areas of the region has also been relieved. [SK131308 Hohhot Nei Monggol Regional Service in Mandarin 1100 GMT 12 May 82]

CSO: 4007/422

BRIEFS

PROVINCIAL RAINFALL--According to a report by the Shaanxi Provincial Meteorological Bureau, on 26 and 27 April it rained in Shaanxi Province and the rainfall in the larger part of this province varied from 10 to 15 mm. The rainfall in Suide, Qingjian, Yanchang, Luochuan, Fugu and Yanchuan counties in north Shaanxi, Xian Municipality and Gaoling, Lantian and Fengxiang counties in Guangzhong and Hanzhong and Hanyin counties in south Shaanxi was 16 to 20 mm. The fainfall in Zhidan, Changwu, Baoji, Lintong, Weinan, Hua Yang and Xixiang counties was 21 to 40 mm. This rainfall has alleviated the drought situation in some places in north Shaanxi and Guangzhong and is beneficial to spring sowing and to the growth of summer crops. [HK051511 Xian Shaanxi Provincial Service in Mandarin 1130 GMT 29 Apr 82]

CSO: 4007/422

TANFANG PREFECTURE PROMOTES FARM MACHINERY MANAGEMENT RESPONSIBILITY SYSTEM

Jinan DAZHONG RIBAO in Chinese 10 Feb 82 p 2

[Article by Li Shanquan [2621 1472 3123]: "Tanfang Prefecture Implements the Farm Machinery Management Responsibility System--Farm Machinery Managed Well and the Economic Gain Is High"]

[Text] Tanfang Prefecture has actively implemented the farm machinery management responsibility system and has realized visible economic results.

In recent years, the number of farm machinery units has continued to increase in Tanfang Prefecture. At present, the whole prefecture already owns 33,091 tractors, and the total power of farm machinery has reached 380,000 horsepower. The total value of fixed assets in farm machinery has reached over 500 million yuan, constituting over one-third of the fixed agricultural assets of the whole prefecture. To further manage and use these units of farm machinery well, the committee of Tanfang Prefecture and the administrative office studied and decided to further strengthen and perfect the farm machinery management responsibility system, improving the percentage of farm machinery in good condition and the rate of utilization so that the machinery can fully develop its function in production. To implement the farm machinery management responsibility system, they held farm machinery management cadre training classes at each level to train a backbone force in farm machinery management. Later, each county and city implemented different forms of the farm machinery management responsibility system by suiting measures to local circumstances according to the actual situation of the locality. According to statistics, among the 237 commune tractor stations throughout the prefecture, 50 stations have implemented contracting tractors to professionals and sharing a percentage of the profits, constituting 24 percent. There are 138 stations that have implemented accounting for each tractor and the five quotas and one reward system, constituting 58 percent. There are 12 stations that have implemented the system of floating wages with rewards, constituting 5 percent. There are 15 stations that have implemented conprehensive contracts, constituting 6.5 percent. There are 15 stations that have implemented quota management, constituting 6.5 percent. There are 10,104 units of production teams and brigades throughout the prefecture that have farm machinery. Among them, 21 percent have implemented contracts to specialists and linking remuneration with production, and 42 percent have implemented unified management and accounting for single machinery units, 9 percent have implemented the system of comprehensive contracts with several unified categories, and 28 percent have implemented fixed quota management.

The implementation of the farm machinery management responsibility system has unified authority, responsibility and profits, and cadres and commune members have strengthened self-awareness in managing and using farm machinery well. For example, the Dawangzhuang farm machinery team of Chengguan Commune, Gaomi County, implemented contracts to specialists. The percentage of farm machinery in good condition reached above 90 percent. Mechanized farming reached over 80 percent. In the past, this brigade suffered losses of over 10,000 yuan in farm machinery each year. Last year, the farm machinery team submitted over 30,000 yuan in profits to the brigade and kept 16,500 yuan. Each farm machinery operator received a reward of 359 yuan. As the level of agricultural mechanization rose, this brigade freed 76 percent of the labor force to engage in industrial and sideline production and the economic revenue of the collective continued to increase.

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CSO: 4007/252

BRIEFS

COTTON APHID PEST--According to information released by the Shandong provincial crop disease and the insect pest investigation station, the current dry and hot weather is good for growth and reproduction of cotton aphides. The aphid density is rising quickly. In some areas, about 30 to 50 percent of cotton crops are hit by aphides, and there are over 500 aphides in each 100 cotton plants. [SK252210 Jinan Shandong Provincial Service in Mandarin 2300 GMT 24 May 82]

CASH CROP PLOTS--Jining Prefecture, in Shandong Province, has strived to improve economic returns in developing a diversified economy by vigorously attending to cash crop plots. The prefecture's income from the diversified economy totaled 360 million yuan for the first 4 months of this year, up 39 percent over the corresponding 1981 period. Avoiding cutting into good farmland, communes and brigades in the prefecture have expanded cash crop plots to 580,000 mu from last year's 320,000 mu. [SK172206 Jinan Shandong Provincial Service in Mandarin 2300 GMT 14 May 82]

WINDS THREATEN WHEAT GROWTH--Since May, wheatfields in Shandong Province have been repeatedly hit by hot and dry winds. Over 40 million mu have been affected. Hot and dry winds came earlier this year, were stronger and wrought more havoc than last year. Except for Jining Prefecture, the southern part of Weifang Prefecture and the middle part of Linyi Prefecture, most wheatfields in the province have been hit by winds. [SK262223 Jinan Shandong Provincial Service in Mandarin 2300 GMT 25 May 82]

LIAOCHENG PREFECTURAL AGRICULTURE--Jinan, 26 May (XINHUA)--Liaocheng Prefecture, Shandong, is growing 4 million mu of cotton. It produced 3.66 million dan of cotton in 1981. It also grows 3 million mu of wheat. [OW300843 Beijing XINHUA Domestic Service in Chinese 0155 GMT 26 May 82]

CSO: 4007/428

SHANXI

PROVINCE TAKES MEASURES TO RECOVER FROM WINDSTORM

HK200310 Taiyuan SHANXI RIBAO in Chinese 9 May 82 p 1

[Report: "The Provincial Agricultural Department Demands That the Province Urgently Mobilize to Overcome the Windstorm Disaster and Strive for a Bumper Harvest"]

[Text] Editor's note: In early May, our province was hit by a low-temperature windstorm from the north to the south and the production of wheat, cotton and vegetables was damaged. We must neither despair nor slacken our vigilance in the face of this natural disaster. Leading members at various levels must go to the frontline, urgently mobilize the masses, the effective measures, combat the disaster and provide disaster relief, and strive to repair the damage caused by the disaster. All departments and trades must also take action, actively allocate and transport materials and support the peasants in combating the disaster and striving for a bumper harvest. [End editor's note]

Beginning during the night of 1 May to 3 May, a windstorm and falling temperatures struck our province. In most places, wind reached force 59 to force 8 (on the Beaufort scale) and in some places, it reached as high as force 11 and force 12. Such a windstorm had never been seen before in our province. The production of wheat, cotton and vegetables was damaged. To combat natural calamities and strive for a bumper harvest, the provincial agricultural department has put forth three concrete measures a few days ago.

This windstorm has adversely affected the growth of wheat. At present, wheat in the southern part of Shanxi is in the initial period of flowering and filling. Due to the intensity of the windstorm and the loss of water content, the pollination is low and the boot leaves of the wheat suffer from root lesions. A small amount of the wheat, which had been too closely sowed, is suffering from lodging. According to the statistics of Yuncheng Prefecture, some 411,000 mu of wheatfields in the whole prefecture have obviously been affected by the disaster. The seedling cotton has also been damaged by this windstorm. According to incomplete statistics from Hongkong Yicheng, Xiangfen, Fushan and Ji Xian counties and Houma Municipality in Linfen Prefecture, about 30,000 mu of cotton plants had their seed leaves tore off. This year, the area of cotton plants protected by plastic sheets has increased throughout the province. In the portion of cottonfields where the plastic sheets had not been properly secured, cotton seedlings were damaged as a result of the plastic sheets being tossed by the wind. In Yuncheng Prefecture, some 6,000 mu of cottonfields had their plastic sheets ripped or blown away. The cotton seedlings lost their seed leaves as a result and they have ceased growing.

This windstorm also damaged vegetable production in urban suburbs. According to preliminary statistics from Qingxu County and the northern and southern suburbs of Taiyuan Municipality, more than 8,000 mu of vegetables have been affected. Of the 839 plastic covered sheds in the whole municipality, about 550 were damaged or destroyed. Of the 30,000 hothouses and more than 3,000 mu of plastic sheet covered vegetable fields in the municipality, about a third had their plastic sheets lifted or their hothouse installations destroyed. Five of the communes in the suburbs of Changzhi Municipality have been more seriously hit by the disaster. Of the 200 large-size plastic covered sheds in Datong Municipality, some 10 have been destroyed.

In view of the above-mentioned conditions, the provincial agricultural department has called on various localities to strengthen leadership over disaster relief work, adopt corresponding remedial measures according to the extent of crop damage as a result of the disaster, and reduce the damage caused by the disaster to a minimum.

1. As for wheat, they must strengthen irrigation and spraying of phosphatic fertilizer. On the one hand, they must restore the vitality of the wheat affected by the disaster as quickly as possible; on the other hand, they must take precautionary measures against high temperatures and try to increase the kernel weight of the wheat by means of adding water and fertilizer in suitable amounts.

2. As for cotton, they must continue to grasp firmly and properly the work of examining cotton seedlings and carrying out replanting. They must quickly mobilize the masses to adopt such methods as cultivating seedlings at the edge of fields, cultivating seedlings in breeding bowls, carrying water for replanting, and carrying out field cultivation transplanting to ensure that the cottonfields will be fully and adequately planted and the seedlings will grow healthy. At the same time, they must conscientiously inspect plastic sheets used to protect the cottonfields and promptly repair and reuse them. Places with suitable conditions should promptly carry out preparatory work for the resowing of cotton and strive to resow a bit more cotton.

3. As for vegetable production, they must mobilize the vegetable farmers to take corresponding measures in the light of different installations, different seedling conditions and different disaster conditions, actively repair the sheds, mend the holes and strengthen the large-size sheds and hothouses. They must repair and rebuild the medium and small-size sheds and hothouses, set up racks and carry out irrigation at the proper time in accordance with the characteristics of different varieties of vegetables and carry out the transplanting and replanting of vegetable seedlings affected by the disaster so that vegetable production can be restored to normal as quickly as possible.

CSO: 4007/422

BRIEFS

COMMUNES' DISTRIBUTION WORK--Rural people's communes in Sichuan Province have completed the work of distribution of earnings for 1981. According to the statistics of the provincial agricultural department, despite serious floods in 1981, there was an increase in grain output, investment results and commune members' grain rations. The province's total grain output in 1981 was 620 million jin more than in 1980, and the total earnings of the collectives and the earnings distributed reached 11 billion yuan in 1981. Total expenditures of the province decreased from 3.9 billion yuan in 1980 to 3.6 billion yuan in 1981, and each person in the province saved an average of 3 yuan on each expenditure. [HK130747 Chengdu Sichuan Provincial Service in Mandarin 2300 GMT 7 May 82]

CSO: 4007/422

BRIEFS

PREFECTURE COW BREEDING--Lhasa, 23 May (XINHUA)--Xizang's Shannan Prefecture actively develops milk cow breeding. It has a total of 177,400 cows, an average of 3 cows per family. About 46 percent of these cows are raised by individual commune members. [Beijing XINHUA Domestic Service in Chinese 0025 GMT 25 May 82]

CSO: 4007/422

THREE-WAY COMPLEXES LEAD TO HIGHER OUTPUT

Kunmin YUNNAN RIBAO in Chinese 9 Feb 82 p 2

[Article by Li Shuliang [2621 2885 2733] et al: "Agriculture-Industry-Commerce Integrated Complexes Under Our Province's Agriculture and Land Reclamation System Are Being Run Better and Better"]

[Text] In the 2 years since the five agriculture-industry-commerce integrated complex companies were set up under our province's agriculture and land reclamation system, they have been run better and better with notable results, fully reflecting the superiority of a coordinated process in agriculture, industry, and commerce.

Specifically there have been some changes, as below:

According to statistics of the general company for the agriculture-industry-commerce integrated complex, last year the five integrated complex companies--Longchuan, Suili, Liming, Chuncheng, and Miqin Dongfeng--rapidly improved their economic results, increasing their total output value by 13.14 million yuan, or 26 percent, over that of some previous years; in 1979, before these five enterprises formed companies, they lost a total of 5.8 million yuan, but last year the companies made a total profit of 6.56 million yuan, or a 166 percent increase over the total profit in 1980.

The tapping of many kinds of managerial sources has changed the past state of affairs created by single-management forms in which "the state was depended on for spending money, the locality for staple food, and the market for non-staple food." Last year the five companies provided the state and markets in various places with over 100 kinds of agricultural and subsidiary products, among which were over 13,700 tons of white sugar, over 600 tons of pork, over 2.5 million jin of milk, 459 tons of powdered milk and malt-milk extract, as well as a great amount of white spirits, wine, candy, sweet cakes, cold drinks, prepared food, vegetables, flowers and plants, fruit, furniture, hardware, and farm tools.

While the province increased its production of commodities, it also expanded the channels for circulation of commodities. The provincial office has signed purchasing and selling contracts with about a dozen provinces, municipalities, and autonomous regions, and within the province the five companies have 167 new commercial network outlets; last year their sales totaled over 20 million yuan, double that of the year before last.

Enlivening country fair trade has promoted price stability. In the past, staff and workers on farms mainly depended on the market for the supply of meat and vegetables, and because there was a great deal of buying on the market the prices of nonstaple foods there were higher than in the city. Now the farms are continuously developing pig raising and the staff and workers are more than self-sufficient in meat. With plenty of food on the market, the county fairs have been enlivened and price stability promoted, and in particular the prices of meat and vegetables have been stable and in some cases have fallen. Last year the Ruili and Longchuan integrated complex put over 200,000 jin of pork on the market, and the price per jin was about 1 yuan 1 jiao. The vegetables put on the market by Dongfeng Farm account for about half of the total amount on the local market.

The prosperous border area economy promotes the construction of small cities. The three agriculture-industry-commerce integrated companies of Longchuan, Liming, and Dongfeng are located far from the county seat. Around the companies small cities have now been built, with residential areas for staff and workers with lower and middle schools, stores, hospitals, motion picture theaters, bookstores, restaurants, cold drink shops, barber shops, tailor shops, repair shops, depots, and hostels.

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CSO: 4007/257

PREVENTION OF SPREAD OF MAJOR POISONOUS WEEDS NOTED

Kunming YUNNAN RIBAO in Chinese 31 Jan 82 p 2

[Article by Ye Long [5509 7893]: "Beware of the Spread of Eupatorium Japonicum and Eupatorium Odoratum--Our Province's Plant Protection Experts Point Out that These Two Harmful Weeds Must Be Eliminated"]

[Text] The harmful weeds that seriously threaten the development of livestock, forestry and agriculture--eupatorium japonicum and eupatorium odoratum--have already begun to spread in our province. We should be more alert. This is the call made by plant protection experts and scientific and technical workers who joined the Weeds Research Committee recently founded by the Provincial Plant Protection Society in Kunming.

They pointed out that there are many harmful weeds that endanger our province's livestock, forestry and agriculture, especially eupatorium japonicum and eupatorium odoratum, which pose the most serious threat. These two harmful weeds have a broad adaptability, and they grow and spread very quickly. As soon as they are introduced, they grow to 20 to 40 centimeters during the first year and in the second year they grow to over 80 centimeters. These two harmful weeds have already spread gradually from Simao, Linchang and Baoshan prefectures to Chuxiong, Honghe, Wenshan and Kunming areas. The area damaged by the weeds in Simao and Linchang prefectures alone has reached over 1 million mu. These two harmful weeds affect the growth of grazing grasses in the mountains, young forests and agricultural crops. The damage they cause is described as follows: 1. After these two harmful weeds propagate, grow and spread, they stifle the growth of grazing grasses, young forests and agricultural crops; 2. Livestock that consumes these grasses will suffer from dysentery and asthma and even die. The pollen will also cause rotting of the eyes and nose, and cause pus. A horse at the horse barn in Zhenkang County mistakenly consumed eupatorium japonicum and almost all the horses in the horse barn died. Now these two harmful weeds are spreading continuously. This is very detrimental to the development of livestock production, forestry and agriculture.

How can these two harmful weeds be exterminated? Plant protection experts and scientific and technical workers believe the ideal method is to develop competitive grazing grasses and economic forests to replace these two harmful weeds. Such research and experiments have been conducted by experts and scientific and technical workers. At present, each locality should pay attention. Whenever these two weeds are discovered, the masses should immediately be organized to eliminate them. Localities already suffering damage by the weeds can use picloram, glyphosate, 2, 4-D weeders to eradicate them. In addition, the area of cultivated land must be fixed to prevent land from going to waste and grazing grasses from going to waste.

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CSO: 4007/252

YUXI PREFECTURE TAKES STEPS FOR BETTER TOBACCO PRODUCTION

Kunmin YUNNAN RIBAO in Chinese 30 Jan 82 p 1

[Article by Shu Quan [2885 0356] et al: "Yuxi Prefecture Draws Up Plans for This Year's Flue-Cured Tobacco Production Early"]

[Text] At the beginning of the new year, the administrative office of Yuxi Prefecture conscientiously analyzed the situation of this year's production of flue-cured tobacco with the determination to even better display the superiority of Yun tobacco, to vigorously tackle the key problem of quality, and to further improve the capacity for market competition, and to improve economic results.

The Yun tobacco of Yuxi Prefecture is well known throughout the country, is the main ingredient for top-grade cigarettes in Beijing, Shanghai, and other places, and is exported to West Germany and other countries. In recent years, the quality, output, per unit area yield, and income of the flue-cured tobacco here have in consecutive years reached the best levels in history. Last year, the prefecture's total output and the purchased amount of flue-cured tobacco both increased by more than 60 percent over those of the previous year, the income of the collective and the commune members more than doubled, and for the first time the proportion of top- and high-grade tobacco broke through the 70-percent mark.

In view of this success, the administrative office of the prefecture analyzed the nationwide trends in flue-cured tobacco development, and concluded that under the new conditions in which the output of flue-cured tobacco is rapidly increasing throughout the country, and in which the amoung of high- and medium-grade leaf tobacco and cigarettes required by domestic and foreign markets has grown, only by improving the quality of flue-cured tobacco and seeking high output with top quality can the prefecture's competitive capacity be strengthened and new markets be opened up. Therefore, the party committee and the administrative office of Yuxi Prefecture are helping all of the counties in the prefecture to vigorously tackle the key problem of the quality of their flue-cured tobacco, and plans this year to raise the proportion of high- and medium-grade tobacco to over 75 percent, thereby obtaining even better economic results than last year.

In order to insure a high output of top quality flue-cured tobacco this year, work has already started on the following items: (1) The prefecture held a top quality-high output experience exchange meeting, which analyzed the potential for top quality and high output of flue-cured tobacco, exchanged and introduced experiences in this respect; and also issued silk banners and certificates of merit to advanced units and commune members for top quality and high output of flue-cured tobacco, encouraging them to further improve the quality of flue-cured tobacco and spur on others. (2) To help the production teams perfect the scientific and technical responsibility system, the prefecture has listed quality improvement as the principal part of contracts. (3) The prefecture is accelerating the training of the flue-cured tobacco cultivation technical force to spread knowledge of scientific tobacco planting. People attending the county- and commune-run flue-cured tobacco training class have completed the course, and these people have already gone to the communes and production teams to explain to the commune members the science and technology of flue-cured tobacco. (4) The prefecture increased the building of curing sheds. The counties have decided to build over 6,800 curing sheds, of which construction has already begun on over 2,300. (5) The prefecture got a good grip on the work of cultivating strong sprouts and of scientifically applying fertilizer. A batch of production teams in Yuxi and Jiangchuan counties arranged tobacco seedbeds well ahead of time, and began to work hard to change the fertilizer structure. (6) The prefecture organized various departments concerned to do well ahead of time the work of supplying materials, funds, and technology for flue-cured tobacco production.

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CSO: 4007/257

SIX COUNTIES TRY OUT S&T RESPONSIBILITY SYSTEM

Kunmin YUNNAN RIBAO in Chinese 10 Feb 82 p 1

[Article by Wu Ronghua [2976 2837 5478] et al: "Great Achievements Made by Science and Technology Combined Output Responsibility System"]

[Text] The agricultural departments, the scientific and technological departments, and the scientific and technological teams of some communes and production brigades of six counties--Yuxi, Tonghai, Eashan, Yimen, Jiangchuan, and Yuanjiang--have tried out the scientific and technological combined output responsibility system, adopting and signing contractual forms to spread agricultural science and technology. In this, they have achieved marked results. Last year all 33 of the contracts signed for the scientific and technological combined output of spring-sown crops resulted in increased output and harvests, and all commitments for awards and compensation were honored.

After various forms of the agricultural production responsibility system were established in rural communes and brigades in various counties of Yuxi Prefecture, the prefecture successively requested the agroscience departments to help the peasants solve some difficulties encountered in production in order to strive for superior quality and high output in grain and economic crops. In March 1981, the Yuxi Prefectural Science Committee organized prefectural and county agricultural departments, scientific and technological departments, and the agroscience stations of some communes to sign 33 scientific and technological combined output contracts, covering a total area of 13,986 mu, with 1 production brigade, 33 production teams, and 2 peasant households in the above-mentioned 6 counties for raising paddy rice seedlings, changing low-output paddy rice to high-output paddy rice, stabilizing the output of high-output paddy rice, spreading improved varieties of corn, and achieving excellent quality and high output of flue-cured tobacco. The result of the autumn harvest was that increased outputs and increased harvests were achieved contract by contract. For the raising of paddy rice seedlings, 17 jin 3 liang were planted on every mu of land for growing field crops, 14 jin 7 liang less than previously, or a savings of 46 percent; the per unit area yield on the area of 11,708 mu of paddy rice covered by 20 contracts reached 920 jin, an increase over the figure for the year before last of 112 jin 3 liang, or 13.9 percent; on the 158 mu 4 fen of land under flue-cured tobacco contracted for by agroscience institutes in Tonghai, Yuxi, and Yimen counties, good quality and high output were obtained, the average per mu output value increasing by over 40 percent with the highest increasing by over 200 percent; and on the 242 mu 4 fen of land under corn covered by 5 contracts, marked output increases were obtained, with the average per mu output increasing by 40 percent and the highest increasing by 95 percent.

By implementing the agricultural science and technology combined output responsibility system, the prefecture has broken free from the past method of spreading the fruits of science and technology by administrative order, so that authority, responsibility, and benefit have been closely integrated and so that the enthusiasm of the scientific and technical personnel and of the commune members has been aroused quite well. The scientific and technical personnel are conscientious about their responsibilities, and they go to the fields to teach by personal example as well as verbal instruction; the commune members are conscientious about receiving instruction, and they till the land according to instructions from the scientific and technical personnel, which gives joy to the latter and satisfaction to the masses. For the success in the raising of paddy rice seedlings contracted for by the agrotechnical station of Yuanjiang County, the production teams on their own initiative urged the technicians to receive a well deserved bonus, and proceeded to sign contracts for high output of rice and corn.

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CSO: 4007/276

BRIEFS

PREFECTURE FIGHTS DROUGHT--Yunnan Province's Dali Autonomous Prefecture has organized work teams to promote water storage work among peasants in order to counter potential drought. The leaders of the prefectural CCP Committee and prefectural people's government have led seven work teams to go to counties where the situation of water supply was the worst to inspect and promote building of water conservancy projects. As a result, an adequate amount of wells and channels were dug in order to ensure water supply during dry seasons. [HK251001 Kunming Yunnan Provincial Service in Mandarin 1100 GMT 15 May 82]

CSO: 4007/422

ZHEJIANG

TIE YING ON IMPROVING PROVINCE'S FISHERY

HK210921 Beijing RENMIN RIBAO in Chinese 15 May 82 p 2

[Article by Tie Ying, first secretary of Zhejiang Provincial CCP Committee: "Several Questions Concerning the Development of Offshore Fishery"]

[Text] Summary of article: This article expounds on the following five problems related to the development of offshore fishery in Zhejiang Province: First, since Zhejiang is a province with a vast stretch of sea area and rich aquatic resources, offshore fishery is very important in the province's national economy. Second, the policies for the development of offshore fishery should be clearly understood. These policies are to go outward to open up outer offshore fishing grounds, to emancipate people's minds in vigorously developing aquatic breeding in beach and shallow sea areas, and to conscientiously develop the processing and comprehensive exploitation of aquatic products. Third, since there are both sea areas and mountain areas in fishing districts, we should vigorously utilize the favorable conditions provided by both the sea and the mountains and develop diversified undertakings. Fourth, we should implement various forms of the production responsibility system geared to fishery in the light of local conditions and continuously to perfect the system in practice. Fifth, we should strengthen aquatic scientific research, do a good job of investigating the aquatic resources, popularize cultural education and scientific and technical knowledge in the fishing districts and train a new generation of fishermen. [End of summary]

Since the 3d plenary session of the 11th CCP Central Committee, there has been a fine situation in the offshore fishery in Zhejiang Province. This is mainly shown by the following facts: 1) By implementing the policy of readjusting the national economy we have gradually readjusted the structure of our aquatic production, protected our offshore aquatic resources, developed aquatic breeding, and the processing of aquatic products and other diversified undertakings. 2) We have set up and perfected various forms of the production responsibility system geared to fishery which gives play to both the superiority of the collective economy and the initiative in production of individual commune members. Thus we have fulfilled in a relatively satisfactory manner the quotas of purchases and transferences of aquatic products assigned by the state. 3) Along with the development of production and with the changes resulting from the implementation of the policies of raising the purchase prices of aquatic products and allowing negotiable premiums for those goods purchased in excess of the purchase quotas, there have been substantial increases in both the accumulation of the collectives and the income of individual commune members.

The problems we should study are: First, why for more than a decade the annual output of our offshore aquatic production has remained within the range of 14 to 15 million dan and how can we make a breakthrough in increasing production. Second, the problem of the steady decline in the supply of fish for our urban and rural people. In 1981, the average supply of fish per capita at the provincial fixed prices is only 8.9 jin and the quality of the fish supplied is relatively poor. How can we solve the problem of "difficulties in buying fish in an area that was once called the 'land of fish and rice?'" And third, in our fishing areas, 25 percent of the total labor force is redundant. How can we find employment for such a large surplus labor force? The Zhoushan Prefectural CCP Committee has clearly pointed out, "The people want fish to eat and the fishermen want employment. What should we do?" It has called on the cadres at all levels throughout the prefecture to discuss in depth this problem.

Faced with this situation, we are of the opinion that in order to develop offshore aquatic production in our province, we have to further study and solve the following problems:

1. A Full Understanding of the Importance and Role of the Development of Offshore Fishery in Developing Our Province's Economy

There is a vast stretch of ocean area in Zhejiang Province with abundant aquatic resources, which provides great potential to tap in developing economy. This ocean area stretchs from 27 to 31 degrees north latitude, and to the east it extends to the edge of the continental shelf. Its total area is 223,000 kilometers, which is more than twice that of land area of the province. However, we have as yet failed to exploit quite a large part of these aquatic resources to benefit our people. An example of the offshore fishing alone is enough to prove this. Our fishing is chiefly carried out in the fishing grounds along or near the coast. As for the fishing grounds in the outer aquatic areas which lies beyond the 80 meter isobath, we seldom fish there though its area is as large as 98,000 kilometers, which constitute 44 percent of the total aquatic area of the province. Another example is aquatic breeding. We have only utilized 10 percent of the 1.5 million mu of beach and shallow sea area along the province's 2,200 kilometers of coastline that can be utilized for aquatic breeding. Moreover, the output of those areas that we have utilized in aquatic breeding is very low and the total output value of these areas only constitutes 5 percent of total fishery output value of the province. This demands that we widen our field of vision and regard the development of offshore fishery as strategically as important a task in Zhejiang's four modernizations as the construction of the mountainous areas. The decade of fluctuation in aquatic production stems from many causes, but the chief cause is our failure to attach due importance to fishery. Moreover, we overlooked the characteristics of fishery and have adopted quite a large number of measures that were against the natural law of the aquatic areas and that are against the economic law. Today, we should conscientiously sum up our experiences and strive to discover the objective law governing economic development of the aquatic areas. We should also make investigations in order to clearly know our aquatic resources and in order to form correct policies to tap to the full the great potential of the ocean. By so doing we will be able to promote the four modernizations in our province.

II. The Problem on the Policies Related to Aquatic Production

In order to put an end to the fluctuation in offshore fishery we should make new breakthroughs in all the sections of production, including fishing, aquatic breeding and the processing of aquatic products.

1) Open up fishing grounds in the outer offshore areas. This is an inexorable trend of the development of offshore fishery. It also serves to protect the inshore aquatic resources. At present there is such a large number of inshore fishing boats which make the inshore fishing grounds so crowded that it has become imperative for us to restrict their fishing capacity within a certain limit. However, the restriction should be supplemented by giving guidance in opening up new prospects. We should energetically guide the fishermen to develop fishery in the outer offshore areas and regard this as being precisely the important measure for preserving inshore aquatic resources. The problem now is whether we will be able to open up new prospects by going outward and whether there are fish to catch in the outer offshore areas. To solve this problem, we have made a special investigation in Zhoushan. The investigation proves that we have all the favorable factors for going outwards. At present, we have not only a fleet of outer offshore fishing boats with some state-owned fishing vessels as its backbone, but also a number of large motorized sailboats owned by individual fishermen. Moreover, in some counties in Zhoushan and Ningbo prefectures, the fishing communes and brigades that have sound economic bases and high technical standards in fishing are all applying for building bigger new ships with funds raised by themselves in order to meet the demand of extending their fishing operations to outer sea areas. The practice of the Zhoushan No 2 Offshore Fishery Company has proved that there are fish to catch in the outer offshore waters. The 14 old AFS new fishing vessels in that company have caught 12,310 tons of fish during the past 2 years. Seventy-two percent of their fishing operations have been carried out in the outer areas. The average annual output of each of these two fishing vessels is 1,060 tons, of which more than 70 percent have come from the middle and bottom layers of sea waters. They have also caught some fine strains of fish that have never been found in the inshore areas. Other companies have also achieved good results in outer sea fishing. For example, the Zhoushan Fishery Company has achieved relatively good results in catching black scrapers and so has the Ningbo Fishery Company in catching middle and bottom layer fish in the outer offshore areas.

Extending our fishing operations to outer sea areas is the strategic goal in developing our sea fishery. Of course in tactic arrangement we should proceed from reality and strive to make steady progress. As the Zhoushan Islands are relatively near to our outer sea fishing grounds and as the fishermen there have experience in carrying out fishing operations on the sea for a long time, it is feasible to first organize some of the fishing teams of the Zhoushan and Ningbo prefectures to develop outer offshore fishery and at the same time develop fishing vessels and motor sailboats for going further out.

While developing outer sea fishery, we should rationally utilize the offshore aquatic resources under the premise of strengthening the protection of resources. Those species of fish we have fished excessively should now be protected and those that we have failed to fully exploit should now be fully exploited. After years of readjustment the number of motorized sailboats in Wenzhou Prefecture dropped from 794 in 1978 to 712 in 1981, but the total output increased from 580,000 dan to 990,000 dan. In Taizhou Prefecture, because we paid attention to developing drift net and angling operations, we caught 60,000 dan of butterfish, sweetfish and spanish mackerel, which were a 100 percent increase over 1978 and we also caught 120,000 dan of hairtail fish, which were a 70 percent increase over 1978. This proves that in utilizing offshore aquatic resources there is still great potential to tap.

2) We should emancipate our minds and vigorously develop fish breeding in beach and shallow sea areas. Over the past few years, our province has achieved some initial results in developing inshore fish breeding. The area of breeding has continuously been expanded and the varieties become increasingly varified. Ninghai County has taken the advantage of the favorable geographical conditions of Xiangshan Port and Shanmen Gulf and vigorously developed inshore fish breeding. Up to last year, the county utilized 44 percent of the waters that can be used for breeding and the output of its fish breeding constituted 38 percent of its total fishery output. This has proved that there is a bright prospect for aquatic breeding. Of course the natural conditions differ in areas and the capability of aquatic breeding in various areas also differ. However, as long as we attach as much importance to this work as the Ninghai County CCP Committee has done and as long as we adopt corresponding policies that are suited to the local conditions, we will be able to utilize the 1.3 million mu underutilized beach and shallow sea areas and thus substantially raise our income.

Besides the beach and shallow sea areas, we also have a vast area of freshwaters in our coastal counties that can also be used for fish breeding. The total area of lakes and reservoirs is 2.27 million mu in our province. If the area of rivers is added to it, the total area is about 5.53 million mu. This also constitutes an abundant natural resource for developing fishery in our province. In the past few years we have also made some progress in developing freshwater fish breeding. However, there is still great potential to tap in increasing the area of breeding and the output per area. We must vigorously develop freshwater fish breeding in the light of local conditions.

3) We should vigorously develop the processing and comprehensive exploitation of aquatic products. The processing of aquatic products has always been a weak sector in the aquatic production of our province. Year after year we let large quantities of fish and shrimps we have caught become

rotten and inedible. This is really a pity. Now some areas have already begun to develop fish processing. The Ningbo Offshore Fishery Company has developed the processing of black scrapers. It cuts the meat of the fish off and then bakes the meat into dried strips, which sell very well in Japan. The skin and head of these fish are processed into fish powder to be used as fodder. Oil is extracted from the liver of the fish and used as an industrial raw material. In the past 2 years, Wenling Aquatic Product Company has developed the processing and packing of diversified small fish into food, which is well received in the market. Along with the increase in the cold storage capacity of the fishing areas, this work will become increasingly important and we must pay close attention to doing it well.

III. The Problems of Diversified Undertakings in Fishing Areas

In the fishing areas, there are both sea areas and mountains. Both abound with resources, which provide favorable conditions for us to develop diversified undertakings. We should regard the development of diversified undertakings in the fishing areas as a major task in implementing the production policies in the fishing areas and we should pay attention to fulfilling this task well in the same manner as we do to fishery.

There are quite a few advantages in developing diversified undertakings in fishing areas. First, it can provide many job opportunities for redundant laborers. Second, it facilitates the construction of the land base for fishery and will thus facilitate the development of fishery at seas. Third, the output of offshore fishery is not steady and it often fluctuates up and down. When it fluctuates down, the development of diversified undertakings can make up the decrease of income from fishery. This will enable our fishermen to have steadily increasing income and will therefore be an important way for the fishing areas to become rich. Fourth, it will enable the fishing areas to rely on their own strength to provide some materials and goods that are necessary for developing fishery. For example, 20,000 tung oil trees have been planted in Xiangshan County in the past few years and they will bear fruit in the coming 1 or 2 years. Pines have been planted on many islands in Zhoushan Prefecture and many of them have already grown into forests. The Dongwan brigade in Dinghai County has cultivated many mao bamboo trees, which grow very well. Now these bamboos can supply the needs of other brigades as well as all of the Dongwan brigade's own needs.

There are a large number of ways for developing diversified undertakings in fishing areas. We can either develop cutlivation of orange trees, grape vines, tea plants and bamboo trees or engage in breeding long-hair rabbits, otters and minks. We can also develop saltworks, food industry, transportation service, building materials industry and shell carving and other handicrafts. The Xiashan commune in Ninghai County is situated on 11 small islands. During the recent years, besides developing fishing and fish breeding, the commune has reclaimed 960 mu--nearly 1 mu per household--from beach and planted orange trees on it. These trees bore 240,000 jin of oranges last year. The commune has also utilized the local resources to set up a factory to process orange and aquatic products. Last year, the commune obtained 1.75 million yuan of income from this factory. It has also set up other commune enterprises such as stone pit and boat factory.

in 1981, of the total income of the commune 28 percent came from fishing, 29 percent from sea aquatic breeding and 43 percent from diversified undertakings. The average income per laborer was 776 yuan and that per capita was 378 yuan. Now, all the people above the age of 16 are employed in the production of the collective.

IV. The Problem of the Production Responsibility System

Judging by the forms of the production responsibility system that is being implemented in a few counties, there are the following three major forms of the production responsibility system geared to offshore fishery: The first is fixing quotas for output, cost and workpoints and granting rewards for overfulfillment of output quotas and for lowering costs. The second is proportionate division of profits. When this form is implemented, the means of production belong to the brigades but the production is organized by the operation units and the income is divided proportionately between the brigade and the units. The third is assigning full responsibility for fulfilling quotas to units, which are to organize the production and shoulder the responsibility for profits and losses under the unified accounting of the brigade and which should hand over a certain proportion of their profits to the brigade. All the localities and units that have implemented the production responsibility system are carrying out their production satisfactorily. The problem now is to vigorously pay attention to perfecting these forms of the production responsibility system in order to stabilize them.

As for the first form of the responsibility system, the major task for improvement at present is to rationally fix output quotas and the proportion of rewards and penalties and to strengthen cost management. In this respect, the Nanfeng brigade in Daishan County has done its work in a relatively satisfactory manner. The costs of production in this brigade are not charged to the brigade, but to the operation units that have been assigned cost quotas. The proportion of rewards or penalties in relation to profits and losses is 30 percent. Care of all production tools in boats have been assigned to specific persons. Thus it has achieved relatively good results in conserving on materials and goods and in lowering costs. Rewards for output in excess of the output quota have been raised from being 15 percent to being 20 percent of its value. In order to encourage the operation units to catch more second-class industrial fish, it has decided to pay a premium of 1 yuan for every dan of industrial fish that have been caught.

As for the last form of the responsibility system, the major problem we have to solve is to correctly handle the relationship between the unified management and separate assignment of responsibility. The Guoqing fishery brigade in Ningguo County has carried out its unified management by adhering to the principle that the means of production are owned by the brigade and all the manpower should be put under the unified arrangement of the brigade and to the principle that all the financial receipts and expenditures should be recorded in the consolidated account of the brigade and that all the units should follow the guidance of the state plan. At the same time, the brigade has also paid attention to raising the quotas of brigade accumulation funds, public welfare funds, depreciation provision funds and administration charge. In 1981, the brigade collected 86,000 yuan of the above-mentioned funds and charges, which was a 45 percent increase over the year before. The income per capita was 405 yuan, which was 34 percent more than that in 1980. The brigade sold 4,458 dan of aquatic products to the state, which was 21 percent more than in 1980. It has also replaced some old boats with new ones and thus increased its production capacity. These experiences should be vigorously popularized in all the other areas in the light of their local conditions.

V. The Problem that Concerns Scientific Research and Education

The results of the investigation in all the localities have shown that in the past few years our province has achieved some good results in its scientific research related to offshore aquatic production. For example, we have satisfactorily carried out an investigation of the offshore aquatic resources and made some trial improvement of motorized sailboats. Moreover, we have achieved certain results in breeding kelp, laver and prawns and in developing the comprehensive exploitation of black scrapers. All these have promoted the development of offshore fishery. However, taking the situation as a whole, our scientific research has lagged behind the production and has fallen short of the demands of the development of production.

At present, there are 15 offshore aquatic production research institutes and one aquatic production college in our province. We should further implement the policy of scientific research serving production. We should coordinate in carrying out of the general strategy of gradually extending our offshore fishery to outer offshore fishing grounds and soundly carry out research on the major tasks such as investigating outer offshore aquatic resources, outer offshore fishing, aquatic breeding, processing of aquatic products and scientific management. We should strive to achieve good results in the research and use these results in production as soon as possible. Regarding a few key research tasks, we should organize cooperation between different research institutes in order to make a breakthrough by their joint efforts. At the same time, we should correct the erroneous ideas in some of our research workers who attach importance only to scientific research and neglect the popularization of the results of their scientific research. We should conscientiously popularize and make good use of the results of our scientific research. For example, we succeeded in making some trial equipment for using the inertia of engines of motorized sailboats to heighten pressure and using the heat of the waste gas to conserve on energy. We have also succeeded in using the heat of the waste gas of diesel engines of motorized sailboats for cooking and for drying small aquatic products in motorized sailboats. All these results should be vigorously popularized.

It is reported by Wenzhou and Taishan prefectures that at present more than 50 percent of our fishermen, most of whom have been employed as fishermen in the past few years, are fishermen who rely only on the information provided to them by radio broadcasts in carrying out their fishing. These fishermen lack practical experience and often fish blindly. All the localities should pay close attention to training fishermen to master the skills of finding fish and operating fishing nets and to training fishery technicians. At the same time, they should make efforts to popularize cultural education and scientific and technical knowledge in fishing areas in order to train a new generation of fishermen to meet the demand of the socialist modernization of fishery.

CSO: 4007/422

BRIEFS

COUNTY GRAIN PROCUREMENT--As of 25 May, Yuyao County, Zhejiang Province, had procured 11.52 million jin of grain and 100,000 jin of rapeseeds. [Hangzhou Zhejiang Provincial Service in Mandarin 0400 GMT 5 Jun 82]

HUANGYAN COUNTY GRAIN--Huangyan County has reaped a good spring grain harvest from 190,000 mu of land. Total output has reached more than 90 million jin, an increase of 5 percent over last year. [Hangzhou Zhejiang Provincial Service in Mandarin 1040 GMT 29 May 82]

COUNTY CROPS--Ruian County has planted 105,000 mu of sweet potato, spring soybean, peanut and other food grain crops. The county planted 295,000 mu of early rice in the spring, 2,300 mu over the planned target. [OW241307 Hangzhou Zhejiang Provincial Service in Mandarin 0400 GMT 23 May 82]

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